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20403 AT ASSAULT BREAKER MISSILE NUMBER 0011 ROUND
NUMBER M1067 15 DECEMBER 1982(U) ARMY ELECTRONICS
RESEARCH AND DEVELOPMENT COMMAND WSMR NM ATM..

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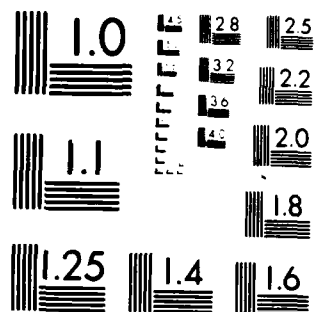
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METEOROLOGICAL DATA REPORT

20403 AT Assault Breaker
Missile Number 0011
Round Number 11067
15 December 1962

by

DONALD C. KELLER
Program Support Coordinator
Phone Number (505) 673-0500
AVN Number 349-0500

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
Meteorological data gathered for the launching of the 20403 AT Assault Breaker, Missile Number 0011, Round Number M10G7 are presented in tabular form.		

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INTRODUCTION

20403 AT Assault Breaker, Missile Number 0011, Round Number M1067, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0839:23 MST, 15 Dec 1982. The scheduled launch time was 0800 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes, and the Jallen Met Site at 0750, 0840, and 0910 MST.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from pilot-balloon observations at:

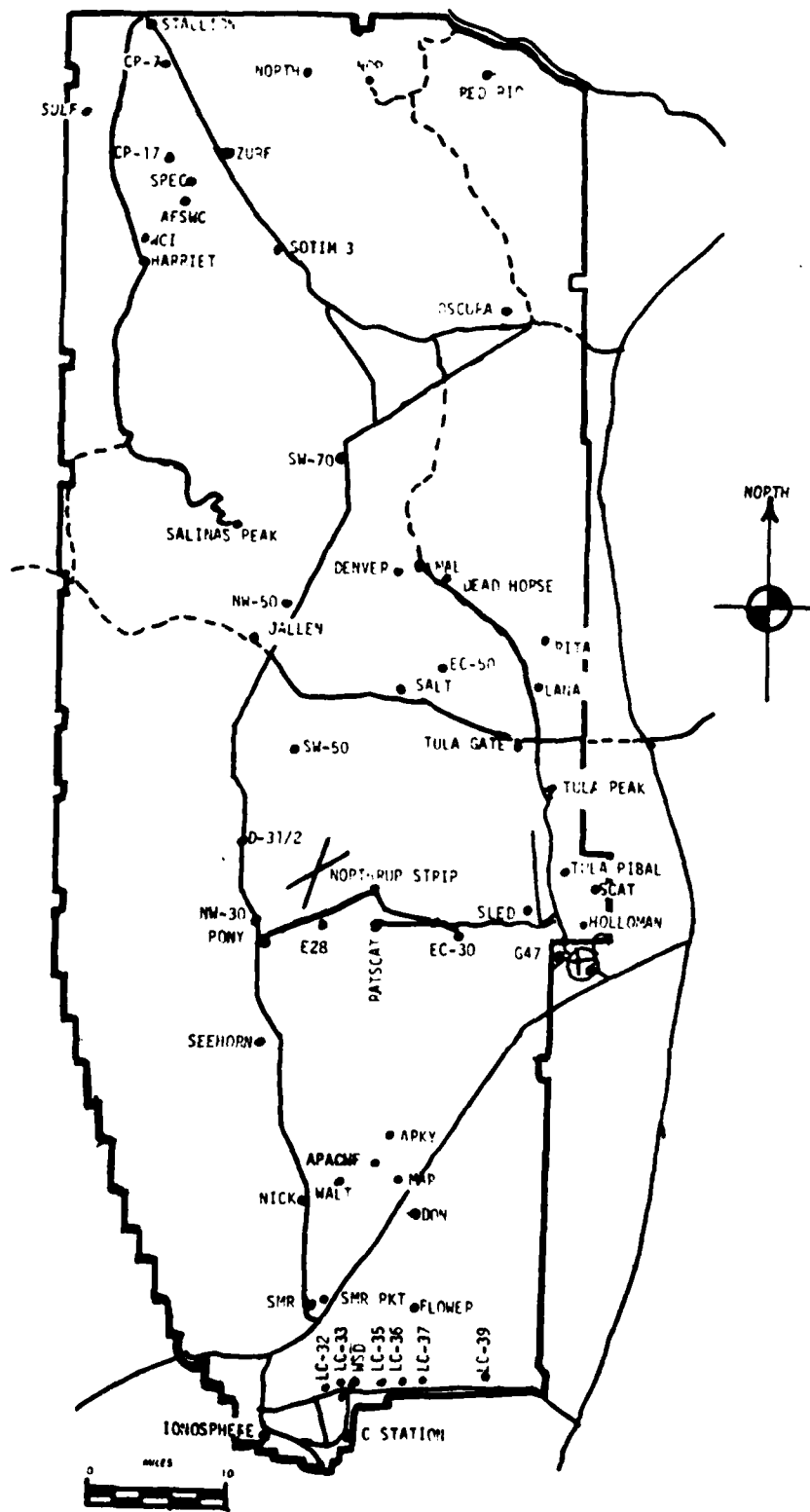
<u>SITE</u>	<u>ALTITUDE</u>	<u>TIME</u>
WSD	2760 Meters	0827 MST
WSD	2760 Meters	0840 MST
JALLEN	1800 Meters	0740 MST
JALLEN	2940 Meters	0835 MST

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

Jallen	0530 MST
LC-37	0700 MST
Holloman	0700 MST
WSD	0830 MST
Jallen	0835 MST

WSMR METEOROLOGICAL SITES



-93
100' 01' Area



Y137,500

Rad
Tower

Y136,000

1-5 Radar

○ Anemometer Pole #3

○ Anemometer Pole #2

1-579A

1-519A

1-351A

1-350A

Anemometer Pole #1

Y135,500

Y485,000

Y485,500

Y486,000

Y135,000

1-501

LINE OF FIRE

PROJECT SURFACE OBSERVATION

TABLE 1												
STATION LC-33 E&A												
DATE 15		Dec		82		X = 484,982.64 Y = 185,957.73 H = 3995.00						
TIME	DAY	MONTH	YEAR	PRESSURE mbs	TEMPERATURE OF OC	DEW POINT OF OC	RELATIVE HUMIDITY %	DENSITY gm/m ³	WIND DIRECTION degs In	WIND SPEED kts	WIND CHARACTER kts	VISIBIL- ITY
0840				888.5	2.9	-2.1	69		150	02		50

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	AMT	TYPE	AMT	TYPE	
	5	CS	25,000				

PSYCHROMETRIC COMPUTATION

TIME: MST	0839	
DRY BULB TEMP.	2.9	
WET BULB TEMP.	0.8	
WET BULB DEPR.	2.1	
DEW POINT	-2.1	
RELATIVE HUMID.	69	

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WIND

POLE #1 X485,974.29 Y185,057.73 H3983.00 33.7 ft. AGL			POLE #2 X485,974.29 Y185,057.73 H3983.00 33.7 ft. AGL			POLE #3 X485,977.29 Y185,056.96 H3983.00 33.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	102	03	T-30	087	02	T-30	084	04
T-20	117	02	T-20	087	01	T-20	079	04
T-10	123	02	T-10	087	02	T-10	078	04
T-0	123	02	T-0	087	02	T-0	078	04
T+10	134	02	T+10	091	02	T+10	078	04

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	135	03	T-30	100	03
T-20	145	02	T-20	100	03
T-10	145	02	T-10	100	03
T-0	148	02	T-0	100	03
T+10	149	02	T+10	105	03

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	098	04	T-30	124	02
T-20	098	04	T-20	124	02
T-10	098	03	T-10	121	02
T-0	098	03	T-0	121	02
T+10	098	03	T+10	121	02

PROJECT SURFACE OBSERVATION

TABLE 4		STATION JAL-R	
DATE	15 Dec 82	X= 451,560.00	Y= 465,177.00 H= 4051.00
TIME	M S I		
		RELATIVE HUMIDITY %	WIND DIRECTION degs To
		TEMPERATURE OF °C	WIND SPEED mps
		PRESSURE mbs	WIND CHARACTERISTICS
0750		885.1	310 04
		-0.1	
0840		885.6	080 02
		-0.3	
0910		885.9	070 03
		1.0	
		-3.9	
		64	
		83	
		70	
		40	
		40	
		40	

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	HGT	AMT	TYPE	HGT	
	2	CS	25,000				
	4	CS	25,000				
	4	CS	25,000				

PSYCHROMETRIC COMPUTATION

TIME:	0750	0840	0910
DRY BULB TEMP.	-0.1	-0.3	1.0
WET BULB TEMP.	-2.3	-1.3	-1.0
WET BULB DEPR.	2.2	1.0	2.0
DEN POINT	-6.2	-2.9	-3.9
RELATIVE HUMID.	64	83	70

PILOT BALLOON MEASURED WIND DATA:

TABLE 5

RELEASED FROM WSD

DATE 15 Dec 82

TIME 0827 MST

COORDINATES (WSTM) X= 488,852.29 Y= 184,982.45 H=3993.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	060	05
60	015	02
120	343	03
180	358	07
240	354	09
300	357	08
360	014	07
420	019	07
480	020	06
540	013	02
600	316	02
660	280	01
720	305	02
780	255	01
840	000	02
900	325	03
960	308	05
1020	291	08
1080	285	10
1140	288	11
1200	285	12
1260	272	10
1320	280	09
1380	292	09
1440	292	08
1500	295	09
1560	301	11
1620	300	13

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 6

RELEASED FROM WSD DATE 15 Dec 82 TIME 0840 MST

COORDINATES (WSTM) X= 438,852.29 Y= 184,982.45 H= 3993.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

HEIGHT FGL	DIRECTION DEGREES	SPEED KNOTS
SFC	055	03
60	326	04
120	297	03
180	330	05
240	346	08
300	013	10
360	342	10
420	301	02
480	041	03
540	060	03
600	295	01
660	025	02
720	065	02
780	186	03
840	148	02
900	301	03
960	020	04
1020	317	07
1080	281	04
1140	270	07
1200	263	11
1260	279	09
1320	270	08
1380	299	08
1440	300	06
1500	258	09
1560	307	10
1620	297	14

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 7

RELEASED FROM JAL DATE 15 Dec 82 TIME 0740 MST

COORDINATES (WSTM) X= 488,852.29 Y= 184,982.45 H= 3993.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC		CALM
60		CALM
120		CALM
180	224	01
240	224	01
300	226	01
360	234	01
420	264	01
480	280	02
540	289	02
600	294	03
660	297	03
720	299	04
780	301	05
840	301	06
900	302	07
960	303	07
1020	302	08
1080	302	08
1140	301	08
1200	301	08
1260	300	09
1320	301	09
1380	302	09
1440	303	10
1500	304	10
1560	304	11
1620	305	11

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 8

RELEASED FROM JAL

DATE 15 Dec 82

TIME 0835 MST

COORDINATES (WSTM) X= 451,560.00 Y= 465,177.00 H= 4051.00

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	080	02
60	082	01
120	088	01
180		CALM
240	244	01
300	250	01
360	253	02
420	256	02
480	261	02
540	265	02
600	269	02
660	274	01
720	284	02
780	291	02
840	296	02
900	300	03
960	303	03
1020	302	04
1080	301	05
1140	300	05
1200	299	06
1260	299	07
1320	295	08
1380	292	09
1440	289	10
1500	287	11
1560	285	12
1620	289	12

[illegible][illegible]

AIMING COMPUTER MET MESSAGE

15 December 1982

JALLEN 0530 MST

METCM1332065

151250124884

00444001 27050884

01531001 27490873

02149007 27590846

03503003 27430806

04572013 27330757

05561015 27120711

06554022 26920667

07550039 26720676

08561033 26420587

09561036 26120551

10559037 25810516

11559037 25460482

12546039 24840436

13566040 24030379

STATION ALTITUDE 4051.00 FEET MSL
15 DEC. 82
ASCENSION I.O. 204

SIGNIFICANT LEVEL DATA
3490030204
JALLEN
TABLE 10

GEOGRAPHIC COORDINATES
33.16712 LAT N
106.49311 LONG E

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
884.0	4051.0	-3.0	-7.7	70.0
882.8	4086.4	-2.2	-7.5	68.0
873.9	4353.2	2.4	-4.1	62.0
862.6	4696.8	2.7	-9.8	59.0
856.0	5089.7	2.6	-10.9	56.0
782.7	7269.4	.0	-19.7	21.0
771.3	7655.7	.8	-20.0	18.0
700.0	10197.7	-2.7	-21.4	22.0
644.1	12195.4	-5.0	-25.6	18.0
637.5	12621.1	-5.2	-25.7	18.0
565.5	15681.2	-10.9	-24.5	32.0
500.0	18757.1	-16.7	-29.8	31.0
400.0	24130.7	-29.8	-43.0	26.0
348.3	27324.3	-37.7	-49.4	28.0
300.0	30654.0	-45.9		
250.0	34561.0	-56.0		
223.8	36848.7	-61.9		
209.4	38197.2	-64.1		
205.5	38576.4	-61.9		
200.0	39131.3	-62.0		
191.6	40004.9	-62.4		
189.4	40240.5	-61.0		
176.6	41674.7	-60.6		
164.7	42492.0	-60.8		
166.8	42846.4	-59.8		
156.0	45019.2	-62.7		
124.2	48857.1	-62.5		
120.4	49490.7	-61.6		
114.7	50487.2	-59.3		
107.4	51461.5	-60.7		
100.0	53304.8	-60.9		
70.0	60560.0	-64.2		

GEODETIC COORDINATES
33.16712 LAT N 66
106.49511 LONG W 60

UPPER AIR DATA
3640050204
JALLEN
TABLE 11

STATION ALTITUDE 6091.00 FEET ASL
15 DEC 62 0530 HRS MST
ACQUISITION NO. 24

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES (TN))	SPEED KNOTS	INDEX OF REFRACTION
6051.0	884.6	-3.0	70.0	1130.3	640.8	250.0	1.0	1.000271
6500.0	869.1	2.5	52.2	1096.4	647.4	221.6	.9	1.000263
5000.0	852.9	2.6	36.7	1076.1	647.3	190.7	1.0	1.000253
5500.0	836.9	2.1	33.2	1050.0	640.7	171.7	1.3	1.000247
6000.0	821.2	1.5	29.7	1040.6	645.9	217.9	.8	1.000242
6500.0	805.0	.9	26.3	1023.5	645.2	298.9	3.3	1.000237
7000.0	790.7	.3	22.9	1006.6	644.5	312.6	6.6	1.000231
7500.0	775.9	.5	19.2	987.2	644.6	320.3	10.2	1.000226
8000.0	761.2	.3	18.5	969.1	644.4	321.3	11.8	1.000222
8500.0	746.0	-.4	19.3	953.2	643.6	321.1	12.9	1.000218
9000.0	732.7	-1.1	20.1	937.6	642.8	317.6	13.5	1.000215
9500.0	718.9	-1.7	20.9	922.2	642.0	314.2	14.2	1.000211
10000.0	705.3	-2.4	21.7	907.0	641.2	312.6	15.5	1.000208
10500.0	691.9	-3.0	21.4	891.9	640.4	311.7	17.1	1.000204
11000.0	676.7	-3.6	20.4	876.7	639.7	311.7	19.3	1.000200
11500.0	663.7	-4.2	19.4	861.9	639.1	312.1	21.8	1.000197
12000.0	653.6	-4.8	18.4	847.2	638.4	312.6	24.6	1.000193
12500.0	640.5	-5.1	18.0	832.2	637.9	311.3	26.7	1.000189
13000.0	628.1	-5.9	19.7	818.4	637.0	309.7	28.6	1.000186
13500.0	615.9	-6.8	22.0	805.3	635.9	310.1	28.9	1.000184
14000.0	604.0	-7.8	24.3	792.4	634.8	310.8	29.0	1.000181
14500.0	592.3	-8.7	26.6	779.8	633.7	314.2	29.0	1.000178
15000.0	580.8	-9.6	28.9	767.4	632.6	316.8	29.5	1.000176
15500.0	569.5	-10.6	31.2	755.1	631.5	316.7	31.7	1.000173
16000.0	558.3	-11.5	31.9	743.0	630.3	316.1	34.0	1.000170
16500.0	547.3	-12.4	31.7	730.9	629.2	314.7	36.6	1.000167
17000.0	536.4	-13.4	31.6	719.0	628.0	314.2	37.5	1.000164
17500.0	525.8	-14.3	31.4	707.4	626.9	314.1	37.5	1.000161
18000.0	515.4	-15.3	31.2	695.9	625.7	314.6	37.6	1.000158
18500.0	505.2	-16.2	31.1	684.7	624.6	315.1	37.5	1.000156
19000.0	495.0	-17.3	30.8	673.7	623.5	315.1	36.6	1.000153
19500.0	484.0	-18.5	30.3	663.0	621.8	314.5	35.7	1.000150
20000.0	474.8	-19.7	29.8	652.6	620.3	312.5	34.7	1.000148
20500.0	465.1	-20.9	29.4	642.3	618.8	310.5	34.5	1.000145
21000.0	455.5	-22.2	28.9	632.1	617.3	308.6	34.7	1.000143
21500.0	446.2	-23.4	28.4	622.2	615.8	307.9	36.5	1.000140
22000.0	437.0	-24.6	28.0	612.4	614.2	307.4	38.5	1.000138
22500.0	428.0	-25.8	27.5	602.6	612.7	306.6	41.3	1.000136
23000.0	419.2	-27.0	27.1	593.3	611.2	306.6	43.9	1.000133
23500.0	410.0	-28.3	26.6	584.0	609.7	306.5	45.4	1.000131

STATION ALTITUDE 9551.00 FEET MSL
15 DEC. 62 0530 HRS MST
ASCENSION NO. 270

UPPER AIR DATA
3490030204
JALLEN

GEODETIC COORDINATES
33.16/12 LAT DEG
106.49/11 LON DEG

TABLE 11

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DIRECTION DEGREES TRUE	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	402.2	-29.5	26.1	310.0	46.9	1.000127
24500.0	393.6	-30.7	26.2	313.4	46.2	1.000127
25000.0	385.2	-32.0	26.5	315.5	49.3	1.000125
25500.0	377.0	-33.2	26.9	315.5	49.9	1.000123
26000.0	368.9	-34.4	27.2	315.0	50.7	1.000120
26500.0	361.0	-35.7	27.5	315.9	51.7	1.000118
27000.0	353.2	-36.9	27.8	316.2	52.7	1.000116
27500.0	345.0	-38.1	26.5**	316.0	53.6	1.000114
28000.0	337.9	-39.4	22.3**	318.9	54.4	1.000112
28500.0	330.4	-40.6	18.1**	321.5	55.2	1.000110
29000.0	323.1	-41.8	13.9**	326.4	56.6	1.000104
29500.0	315.9	-43.1	9.7**	330.0	58.5	1.000107
30000.0	308.9	-44.3	5.5**	333.3	61.1	1.000105
30500.0	302.1	-45.5	1.3**	335.3	63.8	1.000103
31000.0	295.2	-46.8		335.7	66.7	1.000101
31500.0	288.4	-48.1		335.7	69.5	1.000099
32000.0	281.7	-49.4		335.1	72.0	1.000094
32500.0	275.2	-50.7		334.3	74.5	1.000096
33000.0	268.7	-52.0		333.2	77.0	1.000094
33500.0	262.7	-53.3		332.1	77.3	1.000093
34000.0	256.6	-54.5		331.1	76.6	1.000091
34500.0	250.7	-55.8		330.0	74.3	1.000090
35000.0	244.7	-57.1		328.5	70.9	1.000084
35500.0	238.9	-58.4		326.2	68.6	1.000086
36000.0	233.2	-59.7		323.0	67.2	1.000085
36500.0	227.6	-61.0		319.5	66.0	1.000083
37000.0	222.1	-62.1		315.6	65.1	1.000082
37500.0	216.7	-63.0		312.1	64.2	1.000080
38000.0	211.4	-63.8		308.6	63.0	1.000078
38500.0	206.3	-64.4		305.0	62.1	1.000076
39000.0	201.3	-65.0		302.2	62.0	1.000074
39500.0	196.4	-65.2		299.4	62.1	1.000072
40000.0	191.6	-65.4		297.5	61.9	1.000071
40500.0	187.0	-65.9		295.0	61.7	1.000068
41000.0	182.5	-66.0		294.9	61.0	1.000067
41500.0	178.1	-66.0		294.4	59.6	1.000065
42000.0	173.8	-66.7		293.9	58.0	1.000063
42500.0	169.6	-66.8		293.2	55.5	1.000062
43000.0	165.6	-66.8		292.4	53.0	1.000060
43500.0	161.0	-66.5		290.9	50.7	1.000059

** AT LAST ONE SOUNDED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 1001.00 FEET 15 DEC. 52 0530 HRS MST ASCENSION NO. 204				UPPER AIR DATA 3490030204 JALLEN TABLE 11 Cont'd				GEODOLIC COORDINATES 33.10712 LAT DEG 106.49511 LONG DEG			
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TRUE)	SPEED KNOTS	INDEX OF REFRACTION			
44000.0	157.7	-61.2		259.2	567.1	289.5	48.4	1.000058			
44500.0	153.9	-62.0		253.8	560.2	280.2	47.2	1.000057			
45000.0	150.1	-62.7		248.5	565.2	287.2	46.5	1.000055			
45500.0	146.5	-62.7		242.5	565.2	286.9	46.8	1.000054			
46000.0	142.9	-62.6		236.5	565.2	287.0	47.7	1.000053			
46500.0	139.5	-62.6		230.8	565.3	287.5	48.6	1.000051			
47000.0	136.1	-62.6		225.1	565.3	287.8	49.6	1.000050			
47500.0	132.8	-62.6		219.6	565.3	288.3	50.4	1.000049			
48000.0	129.5	-62.5		214.3	565.4	288.6	50.7	1.000048			
48500.0	126.4	-62.5		209.1	565.4	288.7	50.8	1.000047			
49000.0	123.3	-62.3		203.8	565.7	287.2	49.3	1.000045			
49500.0	120.3	-61.6		198.2	560.7	285.6	47.8	1.000044			
50000.0	117.5	-60.4		192.5	560.2	282.0	44.2	1.000043			
50500.0	114.6	-59.3		186.7	569.7	277.8	40.8	1.000042			
51000.0	111.9	-60.0		182.9	568.7	274.6	38.8	1.000041			
51500.0	109.2	-60.7		179.1	567.8	271.6	37.3	1.000040			
52000.0	106.6	-60.8		174.8	567.8	270.2	37.0	1.000039			
52500.0	104.0	-60.8		170.6	567.7	270.5	37.9	1.000038			
53000.0	101.5	-60.9		166.6	567.6	270.7	38.6	1.000037			
53500.0	99.0	-61.0		162.8	567.5	270.5	38.6	1.000036			
54000.0	96.6	-61.2		158.9	567.1	270.3	38.5	1.000035			
54500.0	94.3	-61.4		155.2	566.8	269.4	36.5	1.000035			
55000.0	92.0	-61.7		151.6	566.5	268.3	34.1	1.000034			
55500.0	89.8	-61.9		148.0	566.2	268.5	32.2	1.000033			
56000.0	87.6	-62.1		144.6	565.9	271.1	31.2	1.000032			
56500.0	85.5	-62.4		141.5	565.6	273.9	30.3	1.000031			
57000.0	83.4	-62.6		138.0	565.3	277.1	31.7	1.000031			
57500.0	81.4	-62.8		134.8	565.0	280.1	33.3	1.000030			
58000.0	79.4	-63.0		131.6	564.7			1.000029			
58500.0	77.5	-63.3		128.0	564.4			1.000029			
59000.0	75.6	-63.5		125.6	564.1			1.000028			
59500.0	73.6	-63.7		122.7	563.8			1.000027			
60000.0	72.6	-63.9		119.6	563.5			1.000027			
60500.0	70.2	-64.2		117.1	563.2			1.000026			

STATION ALTITUDE 6051.00 FEET MSL
15 DEC 72 0530 HRS MST
ASUSCIP-101100. 204

MANDATORY LEVELS
3490030204
JALLEN
TABLE 12

GEOGRAPHIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

PRESSURE (ALP) POTENTIAL MILLIBARS	FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION (DEGREES (TN))	SPEED KNOTS
850.0	5086.	2.6	30.	100.0	1.1
800.0	6089.	.7	25.	302.9	4.5
750.0	6300.	-2.2	19.	321.2	12.6
700.0	10180.	-2.7	22.	312.1	10.0
650.0	12108.	-4.9	10.	312.7	25.2
600.0	14161.	-8.1	25.	311.9	29.0
550.0	16362.	-12.2	32.	315.0	30.0
500.0	18732.	-16.7	31.	315.1	37.0
450.0	21298.	-22.9	29.	300.2	35.9
400.0	24092.	-29.8	20.	311.3	47.2
350.0	27167.	-37.4	20.	310.4	53.1
300.0	30596.	-45.9		335.4	64.6
250.0	34489.	-56.0		329.0	73.9
200.0	39041.	-62.0		301.0	62.0
175.0	41759.	-60.6		294.1	56.6
150.0	44903.	-62.7		287.2	46.5
125.0	48592.	-62.5		280.1	50.2
100.0	53146.	-60.9		270.6	38.6
80.0	57675.	-63.0		282.0	34.5
70.0	60364.	-64.2			

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION, ALTITUDE 4051.37 FEET MSL
15 DEC. 12
ASCENSION, NO. 122
0700 HRS MST

SIGNIFICANT LEVEL DATA
3490100122
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 13

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT
685.1	4051.4	-4.7	-11.7	58.0
879.2	4227.0	3.7	-3.3	60.0
874.4	4373.4	5.1	-9.8	33.0
867.7	4579.6	5.3	-10.0	32.0
864.8	4669.4	5.5	-10.3	31.0
850.0	5131.9	4.6	-12.3	28.0
825.8	5902.3	3.1	-13.8	28.0
817.4	6174.7	4.0	-15.2	23.0
792.3	7004.9	2.6	-19.3	18.0
774.1	7622.1	2.9	-19.0	18.0
700.0	10272.9	-2.0	-22.5	19.0
684.4	10860.5	-2.8	-23.2	19.0
664.5	11627.4	-3.7	-23.3	20.0
650.0	12199.0	-4.6	-23.0	22.0
641.6	12535.6	-4.3	-22.8	22.0
616.0	13587.7	-5.5	-23.8	22.0
547.8	16581.5	-11.1	-26.3	27.0
516.7	18337.9	-15.3	-30.4	26.0
500.0	18862.9	-16.3	-31.7	25.0
467.8	20499.5	-19.7	-35.5	23.0
400.0	24256.7	-28.6	-43.5	22.0
371.8	25866.6	-32.4	-47.2	21.0
362.9	26527.5	-33.6	-47.9	22.0
312.3	29929.7	-42.7		
300.0	30818.1	-45.0		
263.1	33656.1	-52.9		
253.9	34410.7	-53.8		
250.0	34737.9	-54.3		
223.6	37063.1	-60.1		
216.5	37721.9	-63.0		
209.2	39416.6	-63.5		
203.0	39629.2	-60.8		
200.0	39335.2	-59.6		
196.0	39752.3	-58.0		
192.6	40113.5	-59.7		
187.8	40632.1	-60.8		
175.3	42044.0	-60.8		
170.9	42565.9	-60.1		
168.1	42805.5	-60.3		
165.9	43176.6	-59.7		

GEOLITIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

SIGNIFICANT LEVEL DATA
3490180122
LC-37

TABLE 13
Cont'd

STATION ALTITUDE 4051.37 FEET MSL
15 DEC. 82 0700 HRS MST
ASCENSION 110. 122

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE SL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
161.7	43706.9	-58.2		
150.0	45258.2	-60.3		
142.5	46315.5	-59.1		
134.8	47463.1	-59.4		
128.1	48510.0	-61.7		
115.6	50603.8	-62.4		
114.0	50888.4	-61.2		
111.7	51305.8	-61.2		
110.1	51601.9	-60.3		
104.0	52768.4	-62.4		
102.4	53084.7	-61.7		
100.0	53568.6	-62.4		
70.0	60892.5	-59.1		
62.4	63271.3	-59.2		
50.0	67880.9	-57.0		
44.5	70310.9	-58.4		
37.5	73889.1	-56.0		
36.1	74686.0	-57.7		
30.0	78591.5	-52.9		
22.5	84757.9	-51.0		
21.1	86149.5	-48.4		
20.0	87323.3	-45.6		
19.2	88224.0	-45.6		
17.4	90402.4	-44.3		
15.6	92534.1	-46.3		
14.8	93971.7	-46.7		
13.5	96010.4	-42.5		
10.0	102751.1	-41.0		
9.6	103670.5	-41.4		

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LONG DEG

UPPER AIR DATA
3490180122
LC-37
TABLE 14

STATION ALTITUDE 4051.37 FEET MSL
15 DEC. 82 0700 HRS MDT
ASCENSION NO. 122

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
4051.4	805.1	-4.7	58.0	1147.4	630.6	.0	1.000269
4500.0	870.3	5.2	32.4	1087.7	650.4	359.3	1.000256
5000.0	854.2	4.9	28.9	1069.2	649.9	359.3	1.000250
5500.0	838.4	3.9	28.0	1053.1	640.8	359.3	1.000246
6000.0	822.0	3.4	26.2	1035.4	640.2	352.6	1.000241
6500.0	807.5	3.5	21.0	1016.2	643.2	342.0	1.000235
7000.0	792.4	2.6	18.0	1000.5	647.1	319.0	1.000229
7500.0	777.7	2.8	18.0	981.0	647.4	304.7	1.000225
8000.0	763.1	2.2	18.1	964.8	645.7	299.4	1.000221
8500.0	746.7	1.3	18.3	949.9	645.6	303.6	1.000218
9000.0	734.7	.4	18.5	935.2	644.5	314.1	1.000214
9500.0	720.8	-6	18.7	920.7	643.4	313.3	1.000211
10000.0	707.3	-1.5	18.9	906.5	642.3	311.1	1.000207
10500.0	693.9	-2.3	19.0	892.1	641.3	311.1	1.000204
11000.0	680.7	-3.0	19.2	877.3	640.5	312.2	1.000200
11500.0	667.8	-3.6	19.8	862.4	639.8	317.2	1.000197
12000.0	655.0	-4.3	21.3	848.2	639.0	318.7	1.000194
12500.0	642.5	-4.3	22.0	832.1	630.9	317.6	1.000190
13000.0	630.2	-4.8	22.0	817.7	630.3	315.0	1.000187
13500.0	616.1	-5.4	22.0	803.8	637.6	313.9	1.000184
14000.0	606.1	-6.3	22.7	790.8	630.6	313.6	1.000181
14500.0	594.4	-7.2	23.5	778.2	633.5	313.2	1.000178
15000.0	582.8	-8.1	24.4	765.8	634.4	311.8	1.000175
15500.0	571.5	-9.1	25.2	753.6	633.2	310.6	1.000172
16000.0	560.4	-10.0	26.0	741.6	632.1	309.7	1.000169
16500.0	549.6	-10.9	26.9	729.8	631.0	308.2	1.000166
17000.0	538.7	-12.1	26.8	718.6	629.6	306.1	1.000164
17500.0	528.1	-13.3	26.5	707.7	628.1	305.0	1.000161
18000.0	517.6	-14.5	26.2	696.9	626.7	304.9	1.000158
18500.0	507.4	-15.6	25.7	686.1	625.3	307.0	1.000155
19000.0	497.2	-16.6	24.8	674.9	624.1	309.7	1.000153
19500.0	487.2	-17.6	24.2	664.0	622.8	310.0	1.000150
20000.0	477.4	-18.7	23.6	653.3	621.6	310.5	1.000147
20500.0	467.6	-19.7	23.0	642.8	620.3	311.5	1.000145
21000.0	458.1	-20.9	22.9	632.5	618.8	313.6	1.000142
21500.0	448.7	-22.1	22.7	622.4	617.4	317.0	1.000140
22000.0	439.4	-23.3	22.6	612.5	615.9	320.1	1.000138
22500.0	430.4	-24.4	22.5	602.7	614.4	322.9	1.000135
23000.0	421.5	-25.6	22.3	593.1	613.0	326.5	1.000133
23500.0	412.8	-26.8	22.2	583.7	611.5	330.5	1.000131

STATION ALTITUDE 9051.37 FEET, SL
15 DEC. 62 0700 HRS, PST
ASCENSION NO. 122

UPPER AIR DATA
3490180122
LC-37

GEODETIC COORDINATES
32-44175 LAT DLG
106-31232 LONG DLG

TABLE 14

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	CONT'D DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TH)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	404.3	-28.0	22.1	574.4	610.0	331.8	44.4	1.000129
24500.0	395.9	-29.1	21.9	565.1	608.6	332.7	45.0	1.000127
25000.0	387.5	-30.3	21.6	555.7	607.2	332.2	46.5	1.000124
25500.0	379.3	-31.4	21.3	546.4	605.8	331.7	47.3	1.000122
26000.0	371.3	-32.5	21.1	537.3	604.4	331.2	47.1	1.000120
26500.0	363.2	-33.5	22.0	528.2	603.1	330.7	47.0	1.000118
27000.0	355.4	-34.9	18.9**	519.6	601.4	330.0	47.0	1.000116
27500.0	347.7	-36.2	15.7**	511.1	599.7	331.8	46.2	1.000114
28000.0	340.1	-37.5	12.5**	502.6	598.0	334.6	45.3	1.000112
28500.0	332.6	-38.9	9.2**	494.6	596.3	335.0	45.9	1.000110
29000.0	325.4	-40.2	6.0**	486.6	594.6	335.1	46.9	1.000108
29500.0	318.3	-41.6	2.8**	478.7	592.9	332.3	49.8	1.000107
30000.0	311.3	-42.9		471.0	591.2	329.6	53.0	1.000105
30500.0	304.3	-44.2		463.0	589.5	328.4	55.1	1.000103
31000.0	297.5	-45.5		455.2	587.8	327.6	57.1	1.000101
31500.0	290.7	-46.9		447.6	586.0	327.8	58.6	1.000100
32000.0	284.0	-48.3		440.1	584.2	327.7	59.9	1.000098
32500.0	277.5	-49.7		432.7	582.4	326.9	60.9	1.000096
33000.0	271.2	-51.1		425.4	580.6	326.0	60.4	1.000095
33500.0	265.6	-52.5		418.3	578.7	325.0	58.8	1.000093
34000.0	258.9	-53.3		410.2	577.6	322.7	57.1	1.000091
34500.0	252.4	-53.9		401.8	576.8	319.4	55.6	1.000089
35000.0	246.4	-55.0		394.2	575.5	316.3	56.2	1.000088
35500.0	241.0	-56.2		387.0	573.8	313.6	58.4	1.000086
36000.0	235.3	-57.4		380.0	572.2	311.3	60.1	1.000085
36500.0	229.7	-58.7		373.2	570.5	309.9	59.1	1.000083
37000.0	224.3	-59.9		366.5	568.8	308.5	58.2	1.000082
37500.0	218.9	-62.0		361.1	566.1	305.7	55.4	1.000080
38000.0	213.5	-63.2		354.3	564.5	301.6	51.7	1.000079
38500.0	208.3	-63.1		345.6	564.6	298.5	50.8	1.000077
39000.0	203.3	-60.9		333.7	567.5	296.1	50.5	1.000074
39500.0	198.6	-59.3		323.2	569.7	294.9	50.0	1.000072
40000.0	193.7	-59.4		315.7	569.5	294.5	50.5	1.000070
40500.0	189.0	-60.5		309.7	568.1	294.4	51.5	1.000069
41000.0	184.5	-60.8		302.6	567.7	295.1	54.1	1.000067
41500.0	180.0	-60.8		295.3	567.7	295.9	56.8	1.000066
42000.0	175.7	-60.8		288.2	567.7	295.8	57.7	1.000064
42500.0	171.4	-60.2		280.5	568.5	295.5	56.2	1.000062
43000.0	167.3	-60.1		273.6	568.7	293.9	55.0	1.000061
43500.0	163.3	-58.8		265.4	570.4	292.1	51.9	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4600.37 FEET MS
 15 DEC 62
 ASCENSION NO. 100

UPPER AIR DATA
 349010012
 LC-37

TABLE 14
 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA (REGRESSION) KNOTS	INDEX OF REFRACTION
44000.0	139.4	-58.6		250.8	570.6	290.2	1.000058
44500.0	135.6	-59.3		253.5	569.7	288.5	1.000056
45000.0	131.9	-60.0		248.2	568.8	287.6	1.000055
45500.0	128.3	-60.8		242.3	568.7	286.8	1.000054
46000.0	124.7	-61.5		235.9	569.5	286.2	1.000053
46500.0	121.2	-62.1		229.9	569.9	285.3	1.000051
47000.0	117.9	-62.8		224.5	569.7	284.1	1.000050
47500.0	114.6	-63.5		219.4	569.5	282.5	1.000049
48000.0	111.3	-64.2		215.2	568.0	280.4	1.000048
48500.0	108.0	-64.9		211.1	568.5	278.7	1.000047
49000.0	104.7	-65.6		206.2	568.3	277.8	1.000046
49500.0	101.4	-66.3		201.4	568.1	277.6	1.000045
50000.0	98.1	-67.0		196.6	568.8	276.6	1.000044
50500.0	94.8	-67.7		192.0	565.6	275.7	1.000043
51000.0	91.5	-68.4		186.4	567.2	274.0	1.000041
51500.0	88.2	-69.1		181.4	568.0	272.1	1.000040
52000.0	84.9	-69.8		177.3	567.4	270.1	1.000039
52500.0	81.6	-70.5		173.8	568.2	268.0	1.000039
53000.0	78.3	-71.2		169.6	568.2	266.6	1.000038
53500.0	75.0	-71.9		165.8	565.7	279.2	1.000037
54000.0	71.7	-72.6		161.7	565.8	278.1	1.000036
54500.0	68.4	-73.3		157.7	568.1	277.1	1.000035
55000.0	65.1	-74.0		153.7	568.4	277.4	1.000034
55500.0	61.8	-74.7		149.8	568.7	276.0	1.000033
56000.0	58.5	-75.4		146.1	567.0	274.9	1.000033
56500.0	55.2	-76.1		142.4	567.3	272.5	1.000032
57000.0	51.9	-76.8		138.0	567.6	265.2	1.000031
57500.0	48.6	-77.5		135.4	567.9	268.2	1.000030
58000.0	45.3	-78.2		132.0	568.2	271.1	1.000029
58500.0	42.0	-78.9		128.7	568.5	273.5	1.000029
59000.0	38.7	-79.6		125.4	568.8	276.4	1.000028
59500.0	35.4	-80.3		122.3	569.1	278.5	1.000027
60000.0	32.1	-81.0		119.2	569.4	281.2	1.000027
60500.0	28.8	-81.7		116.2	569.7	282.4	1.000026
61000.0	25.5	-82.4		113.3	570.0	288.8	1.000025
61500.0	22.2	-83.1		110.6	569.9	287.4	1.000025
62000.0	18.9	-83.8		108.0	569.9	281.3	1.000024
62500.0	15.6	-84.5		105.4	569.4	274.7	1.000023
63000.0	12.3	-85.2		102.9	569.9	272.3	1.000023
63500.0	9.0	-85.9		100.4	570.0	271.6	1.000022

STATION ALTITUDE 0001.37 FCG 1 MS,
15 DEC. 62
ASCUSSION NO. 122

UPPER AIR DATA
3490130122
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.51232 LONG DEG

TABLE 14

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA	INDEX OF REFRACTION
						DIRECTION (DEGREES TRUE)	
04000.0	60.3	-58.9		97.9	570.3	238.5	1.000022
04500.0	58.8	-58.6		95.5	570.6	247.1	1.000021
05000.0	57.4	-58.4		93.1	570.9	251.9	1.000021
05500.0	55.1	-58.1		90.8	571.3	253.8	1.000020
06000.0	54.7	-57.9		88.6	571.6	252.8	1.000020
06500.0	53.4	-57.7		86.4	571.9	240.5	1.000019
07000.0	52.2	-57.4		84.2	572.2	225.4	1.000019
07500.0	50.9	-57.2		82.1	572.5	232.6	1.000018
08000.0	49.7	-57.1		80.2	572.7	240.3	1.000018
08500.0	48.5	-57.4		78.4	572.3	250.8	1.000017
09000.0	47.4	-57.6		76.6	571.9	248.9	1.000017
09500.0	46.3	-57.9		74.9	571.5	239.3	1.000017
70000.0	45.2	-58.2		73.2	571.1	213.1	1.000016
70500.0	44.1	-58.3		71.5	571.1	189.3	1.000016
71000.0	43.1	-57.9		69.7	571.5	173.7	1.000016
71500.0	42.0	-57.6		67.9	572.0	72.9	1.000015
72000.0	41.0	-57.3		66.2	572.4	44.2	1.000015
72500.0	40.1	-56.9		64.6	572.9	36.4	1.000014
73000.0	39.1	-56.6		62.9	573.3	41.2	1.000014
73500.0	38.2	-56.3		61.4	573.7	51.1	1.000014
74000.0	37.3	-56.2		59.9	573.8	58.1	1.000013
74500.0	36.4	-57.3		58.8	572.4	62.9	1.000013
75000.0	35.6	-57.3		57.4	572.3	67.4	1.000013
75500.0	34.7	-56.7		55.9	573.2	69.3	1.000012
76000.0	33.9	-56.1		54.4	574.0	68.4	1.000012
76500.0	33.1	-55.5		53.0	574.8	67.6	1.000012
77000.0	32.4	-54.9		51.6	575.6	67.0	1.000011
77500.0	31.6	-54.2		50.3	576.4	66.6	1.000011
78000.0	30.9	-53.6		49.0	577.2	67.7	1.000011
78500.0	30.1	-53.0		47.7	578.0	71.6	1.000011
79000.0	29.4	-52.8		46.5	578.3	75.2	1.000010
79500.0	28.8	-52.6		45.4	578.5	74.9	1.000010
80000.0	28.1	-52.5		44.3	578.7	73.3	1.000010
80500.0	27.4	-52.3		43.3	578.9	72.0	1.000010
81000.0	26.8	-52.2		42.3	579.1	73.5	1.000009
81500.0	26.2	-52.0		41.3	579.3	74.9	1.000009
82000.0	25.6	-51.8		40.3	579.5	77.7	1.000009
82500.0	25.0	-51.7		39.3	579.7	62.0	1.000009
83000.0	24.4	-51.5		38.4	579.9	66.3	1.000009
83500.0	23.9	-51.4		37.5	580.1	65.9	1.000008

UPPER AIR DATA
3490180122
LC-37

STATION ALTITUDE 9551.37 FEET MSL
15 DEC. 62
ASCENSION NO. 122

GEOMETRIC COORDINATES
32.40175 LAT DEG
106.31232 LONG DEG

TABLE 14
Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TIN)	SPEED KNOTS	INDEX OF REFRACTION
84900.0	25.3	-51.2		36.6	580.4	63.5	14.5	1.000000
84500.0	22.6	-51.1		35.7	580.6	61.1	14.8	1.000000
85000.0	22.2	-50.5		34.8	581.2	61.2	14.9	1.000000
85500.0	21.7	-49.6		33.9	582.5	61.7	15.0	1.000000
86000.0	21.2	-48.7		33.0	583.7	62.3	15.1	1.000000
86500.0	20.8	-47.6		32.1	585.1	61.7	14.3	1.000007
87000.0	20.3	-46.4		31.2	586.7	102.7	13.9	1.000007
87500.0	19.8	-45.6		30.4	587.7	113.7	13.9	1.000007
88000.0	19.4	-45.6		29.7	587.7	114.3	12.0	1.000007
88500.0	19.0	-45.4		29.0	587.9	115.2	10.1	1.000006
89000.0	18.5	-45.1		28.3	588.3	116.0	8.1	1.000006
89500.0	18.1	-44.8		27.7	588.7	110.8	5.8	1.000006
90000.0	17.7	-44.5		27.0	589.0	99.0	3.6	1.000006
90500.0	17.3	-44.4		26.4	589.2	71.0	2.1	1.000006
91000.0	16.9	-44.9		25.8	588.6	67.4	2.7	1.000006
91500.0	16.6	-45.3		25.3	588.0	97.4	3.4	1.000006
92000.0	16.2	-45.8		24.8	587.4	106.8	3.9	1.000006
92500.0	15.8	-46.3		24.3	586.8	135.0	3.3	1.000005
93000.0	15.5	-46.4		23.8	586.6	104.5	3.7	1.000005
93500.0	15.1	-46.6		23.2	586.4	186.9	4.9	1.000005
94000.0	14.8	-46.6		22.7	586.3	205.2	6.8	1.000005
94500.0	14.5	-45.6		22.1	587.7	215.0	9.0	1.000005
95000.0	14.1	-44.6		21.5	589.0	222.3	10.7	1.000005
95500.0	13.8	-43.6		21.0	590.3	232.3	11.1	1.000005
96000.0	13.5	-42.5		20.4	591.6	241.5	11.7	1.000005
96500.0	13.2	-42.4		19.9	591.8	250.8	13.2	1.000004
97000.0	12.9	-42.3		19.5	591.9	259.5	16.5	1.000004
97500.0	12.6	-42.2		19.1	592.1	265.2	20.0	1.000004
98000.0	12.4	-42.1		18.6	592.2	267.8	23.3	1.000004
98500.0	12.1	-41.9		18.2	592.4	267.3	26.0	1.000004
99000.0	11.8	-41.8		17.8	592.5	266.9	28.7	1.000004
99500.0	11.6	-41.7		17.4	592.7	266.9	30.4	1.000004
100000.0	11.3	-41.6		17.0	592.8	266.4	30.2	1.000004
100500.0	11.1	-41.5		16.6	592.9		29.9	1.000004
101000.0	10.8	-41.4		16.3	593.1			1.000004
101500.0	10.6	-41.3		15.9	593.2			1.000004
102000.0	10.3	-41.2		15.5	593.4			1.000003
102500.0	10.1	-41.1		15.2	593.5			1.000003
103000.0	9.9	-41.1		14.8	593.4			1.000003
103500.0	9.7	-41.3		14.5	593.2			1.000003

STATION ALTITUDE 4051.37 FEET MSL
15 DEC. 62 3700 HRS MST
ACQUISITION NO. 102

MANDATORY LEVELLS
3490180122
LC-37
TABLE 15

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LONG DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
		AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5128.	4.6	-12.3	28.	359.3	5.6
800.0	6742.	3.0	-18.0	20.	350.4	7.2
750.0	8453.	1.4	-20.1	18.	302.7	9.1
700.0	10263.	-2.0	-22.5	19.	311.1	12.1
650.0	12186.	-4.6	-23.0	22.	318.2	22.4
600.0	14248.	-6.8	-24.3	23.	313.5	24.6
550.0	16459.	-10.9	-26.2	27.	308.4	28.2
500.0	18637.	-16.3	-31.7	25.	309.0	29.9
450.0	21410.	-21.9	-37.5	23.	316.6	42.3
400.0	24216.	-28.6	-43.5	22.	332.4	44.6
350.0	27310.	-35.8	-52.1	17.**	350.9	46.5
300.0	30757.	-45.0			327.8	50.4
250.0	3463.	-54.3			317.9	55.0
200.0	39242.	-59.6			295.4	50.2
175.0	41973.	-60.8			295.8	57.0
150.0	45138.	-60.3			267.1	44.9
125.0	46871.	-61.9			277.8	36.8
100.0	53405.	-62.4			279.0	36.9
80.0	57946.	-60.3			291.0	30.5
70.0	60685.	-59.1			300.1	11.8
60.0	63856.	-58.8			239.4	12.1
50.0	67627.	-57.0			241.1	5.8
40.0	72248.	-56.9			36.4	4.5
30.0	78257.	-52.9			72.2	12.2
25.0	82127.	-51.7			81.0	14.0
20.0	86916.	-45.6			109.0	13.9
15.0	93211.	-46.6			192.8	5.3
10.0	102196.	-41.0				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.08365 LAT DEG
106.09965 LON DEG

SIGNIFICANT LEVEL DATA
3490010350
HOLLOWMAN
TABLE 16

STATION ALTITUDE 4120.59 FEET MSL
15 DEC. 82 0700 HRS MST
ASL STATION NO. 330

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
		-2.4	-10.9	
882.1	4120.6	.1	-4.5	52.0
876.9	4281.5	1.2	-7.1	71.0
873.9	4371.9	4.2	-9.5	54.0
860.9	4585.6	4.7	-10.6	36.0
857.0	4692.7	4.3	-11.7	32.0
850.0	5111.9	3.6	-10.1	30.0
813.2	6292.8	-1.5	-18.0	22.0
730.7	9117.2	-1.9	-19.7	27.0
700.0	10239.2	-4.0	-23.6	24.0
643.5	12429.2	-12.3	-26.3	20.0
531.6	17305.7	-16.0	-30.2	30.0
500.0	18835.0	-20.5	-36.1	28.0
455.7	21113.6	-28.3	-42.5	23.0
400.0	24238.8	-37.3	-50.7	24.0
337.8	28154.5	-44.2		25.0
300.0	30813.6	-54.6		
251.5	34619.0	-55.8		
250.0	34745.1	-64.1		
240.8	35533.4	-64.3		
204.9	34854.4	-62.2		
200.3	39312.3	-58.6		
200.0	39342.7	-60.8		
179.4	41574.7	-58.3		
165.1	43280.3	-59.4		
158.6	44114.6	-57.3		
153.4	44804.4	-58.9		
150.0	45269.3	-62.5		
132.1	47804.4	-62.5		
110.9	49897.9	-62.5		
104.0	52796.1	-63.6		
100.0	53592.8	-59.7		
75.0	59311.4	-59.0		
70.0	60902.5	-56.1		
55.9	65593.3	-56.1		
50.0	67935.9	-57.0		
35.3	75235.7	-52.6		
30.0	78670.2	-51.6		
21.2	86113.4	-48.7		
20.0	87373.1	-44.9		
10.9	91069.7			

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.89965 LON DEG

SIGNIFICANT LEVEL DATA

3490010336

HOLLOWAY

TABLE 16

Cont'd

REL. HUM.
 PERCENT

TEMPERATURE
 AIR DEWPOINT
 DEGREES CENTIGRADE

STATION ALTITUDE 1126.59 FEET MSL
 15 DEC 82 0700 HRS MST
 ASCENDING 1.0. 336

PRESSURE GEOMETRIC
 ALTITUDE
 MILLIBARS MSL FEET

12.1	98437.6	-46.8
10.0	102689.8	-39.9
8.3	106913.2	-39.6

GEOMETRIC COORDINATES
32-00865 LAT DEG
106-09965 LONG DEG

UPPER AIR DATA
3490010336
HOLLOWMAN

STATION ALTITUDE 4126.59 FEET MSL
15 DEC 62 0700 HRS MST
ASCENSION NO. 336

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION (DEGREES (IN))	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4126.0	802.1	-2.4	52.0	1133.7	641.4	350.0	4.1	1.000266
4500.0	869.7	3.0	43.2	1095.6	647.9	356.6	4.9	1.000260
5000.0	850.0	4.5	31.0	1069.7	649.5	2.5	6.1	1.000251
5500.0	837.7	4.1	27.4	1051.7	649.0	6.5	7.3	1.000245
6000.0	822.2	3.8	24.0	1033.4	648.6	7.7	8.3	1.000240
6500.0	800.6	3.2	22.4	1016.2	647.9	5.9	9.1	1.000235
7000.0	791.7	2.3	23.3	1000.4	646.9	358.3	9.3	1.000231
7500.0	776.9	1.4	24.1	984.9	645.8	346.6	9.3	1.000228
8000.0	762.3	.5	25.0	969.6	644.7	334.3	9.1	1.000224
8500.0	740.0	-4	25.9	954.6	643.7	321.0	9.1	1.000220
9000.0	734.0	-1.3	26.8	939.8	642.6	310.5	11.5	1.000217
9500.0	720.1	-1.6	26.0	923.2	642.2	304.4	14.7	1.000213
10000.0	706.4	-1.8	24.6	906.4	641.9	303.0	17.9	1.000209
10500.0	693.0	-2.2	23.5	890.3	641.5	305.9	21.0	1.000205
11000.0	679.8	-2.6	22.6	874.9	641.0	311.5	22.0	1.000201
11500.0	666.7	-3.1	21.7	859.8	640.4	315.9	23.1	1.000197
12000.0	654.2	-3.6	20.8	845.0	639.8	316.4	24.6	1.000193
12500.0	641.7	-4.1	20.1	830.5	639.2	315.4	25.8	1.000190
13000.0	629.3	-5.0	21.2	817.0	638.1	311.4	26.7	1.000187
13500.0	617.1	-5.8	22.2	803.7	637.1	309.6	27.4	1.000184
14000.0	605.1	-6.7	23.2	790.6	636.1	309.9	27.9	1.000181
14500.0	593.4	-7.5	24.2	777.8	635.1	310.6	28.9	1.000178
15000.0	581.9	-8.4	25.3	765.1	634.1	311.5	30.2	1.000175
15500.0	570.6	-9.2	26.3	752.7	633.1	310.9	31.2	1.000172
16000.0	559.5	-10.1	27.3	740.5	632.0	310.0	32.0	1.000169
16500.0	548.6	-10.9	28.3	728.5	631.0	309.3	32.5	1.000166
17000.0	538.0	-11.8	29.4	716.7	630.0	308.6	33.0	1.000164
17500.0	527.5	-12.8	29.7	705.4	628.8	306.5	33.7	1.000161
18000.0	517.0	-14.0	29.1	694.6	627.3	304.9	34.2	1.000158
18500.0	506.8	-15.2	28.4	684.1	625.8	304.6	33.5	1.000155
19000.0	496.7	-16.3	27.6	673.4	624.4	304.7	33.4	1.000153
19500.0	486.6	-17.3	26.5	662.4	623.2	305.8	34.3	1.000150
20000.0	476.8	-18.3	25.4	651.6	622.0	306.7	35.6	1.000147
20500.0	467.2	-19.3	24.3	641.0	620.8	307.2	37.4	1.000145
21000.0	457.8	-20.3	23.2	630.5	619.6	308.5	38.8	1.000142
21500.0	448.4	-21.5	23.1	620.5	618.1	310.6	39.8	1.000140
22000.0	439.2	-22.7	23.3	610.8	616.6	314.4	40.8	1.000137
22500.0	430.1	-24.0	23.4	601.2	615.0	319.0	41.9	1.000135
23000.0	421.2	-25.2	23.6	591.7	613.5	323.0	43.5	1.000133
23500.0	412.5	-26.5	23.8	582.4	611.9	326.6	45.4	1.000131

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

UPPLR AIR DATA
3490010330
HOLLOMAN

STATION ALTITUDE 1120.59 FEET MSL
15 DEC. 62 0700 HRS MST
ASCLSSJH 100. 336

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	CONT'D DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
24000.0	404.0	-27.7	23.9	573.3	610.4	329.0	1.000129
24500.0	395.5	-28.9	23.9	564.0	608.9	331.0	1.000126
25000.0	387.1	-30.0	23.8	554.6	607.5	331.5	1.000124
25500.0	378.8	-31.2	23.7	545.4	606.0	331.8	1.000122
26000.0	370.7	-32.3	23.6	536.3	604.6	331.0	1.000120
26500.0	362.8	-33.5	23.4	527.3	603.1	330.2	1.000118
27000.0	355.1	-34.6	23.3	518.6	601.7	331.2	1.000116
27500.0	347.5	-35.8	23.2	510.0	600.2	332.3	1.000114
28000.0	340.1	-36.9	23.0	501.5	598.8	333.4	1.000112
28500.0	332.6	-38.2	20.0**	493.2	597.2	334.5	1.000110
29000.0	325.3	-39.5	15.7**	485.0	595.5	334.9	1.000108
29500.0	318.1	-40.8	11.4**	476.9	593.9	335.3	1.000106
30000.0	311.1	-42.1	7.0**	469.0	592.2	335.1	1.000105
30500.0	304.2	-43.4	2.7**	461.3	590.5	334.7	1.000103
31000.0	297.4	-44.7		453.6	588.8	333.3	1.000101
31500.0	290.6	-46.1		445.8	587.1	331.7	1.000099
32000.0	284.0	-47.4		438.3	585.3	330.7	1.000098
32500.0	277.4	-48.8		430.8	583.5	329.9	1.000096
33000.0	271.1	-50.2		423.5	581.7	328.9	1.000094
33500.0	264.9	-51.5		416.4	579.9	328.0	1.000093
34000.0	258.8	-52.9		409.4	578.2	327.5	1.000091
34500.0	252.9	-54.3		402.5	576.4	327.2	1.000090
35000.0	247.0	-55.0		394.4	575.4	326.8	1.000088
35500.0	241.2	-55.7		386.5	574.4	326.1	1.000086
36000.0	235.4	-57.0		379.3	572.8	323.9	1.000084
36500.0	229.7	-58.2		372.4	571.1	320.1	1.000083
37000.0	224.2	-59.5		365.6	569.5	316.3	1.000081
37500.0	218.8	-60.7		358.9	567.8	312.5	1.000080
38000.0	213.6	-62.0		352.3	566.1	309.3	1.000078
38500.0	208.5	-63.2		345.9	564.5	305.4	1.000077
39000.0	203.4	-64.2		339.1	563.2	305.4	1.000076
39500.0	198.5	-61.9		327.4	560.2	304.0	1.000073
40000.0	193.7	-61.1		318.3	567.2	302.5	1.000071
40500.0	189.2	-60.3		309.4	568.3	300.1	1.000069
41000.0	184.5	-59.5		300.9	569.4	297.4	1.000067
41500.0	180.1	-58.7		292.5	570.5	294.6	1.000065
42000.0	175.7	-59.1		286.1	569.9	292.2	1.000064
42500.0	171.5	-59.0		280.1	569.1	290.2	1.000062
43000.0	167.4	-60.4		274.2	568.2	289.2	1.000061
43500.0	163.4	-60.2		267.2	568.6	288.2	1.000060

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 1126.59 FEET MSL
 15 DEC. 62 0700 HRS MST
 ASLUSION NO. 330

UPPER AIR DATA
 3490010330
 HOLLOMAN

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.09965 LONG DEG

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	IND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
44000.0	159.5	-58.6		259.0	570.6	287.6	53.2	1.000058
44500.0	155.7	-58.9		253.1	570.2	286.9	50.2	1.000056
45000.0	152.0	-58.5		246.6	570.7	286.1	40.0	1.000055
45500.0	148.3	-57.4		239.6	572.2	285.1	45.8	1.000053
46000.0	144.8	-57.7		234.2	571.8	284.2	43.6	1.000052
46500.0	141.4	-58.0		228.9	571.4	283.1	41.4	1.000051
47000.0	138.0	-58.3		223.8	571.0	282.3	39.5	1.000050
47500.0	134.7	-58.7		218.8	570.6	281.9	37.9	1.000049
48000.0	131.5	-59.1		214.0	570.0	281.3	36.5	1.000048
48500.0	128.3	-59.9		209.7	568.9	280.7	36.2	1.000047
49000.0	125.3	-60.8		205.5	567.7	280.1	35.9	1.000046
49500.0	122.2	-61.6		201.3	566.6	279.2	35.9	1.000045
50000.0	119.3	-62.3		197.1	565.7	278.3	35.9	1.000044
50500.0	116.4	-62.3		192.3	565.7	277.9	36.2	1.000043
51000.0	113.6	-62.3		187.7	565.7	278.7	36.9	1.000042
51500.0	110.8	-62.3		183.1	565.7	279.4	37.7	1.000041
52000.0	108.1	-62.3		178.7	565.7	280.2	38.8	1.000040
52500.0	105.5	-62.3		174.3	565.7	281.1	40.1	1.000039
53000.0	103.0	-62.6		170.4	565.2	281.9	41.6	1.000038
53500.0	100.5	-63.4		166.9	564.2	282.7	43.3	1.000037
54000.0	98.0	-63.3		162.7	564.3	283.4	45.2	1.000036
54500.0	95.7	-63.0		158.6	564.8	284.0	47.1	1.000035
55000.0	93.3	-62.6		154.5	565.2	284.2	40.6	1.000034
55500.0	91.1	-62.3		150.5	565.7	284.1	49.9	1.000034
56000.0	88.9	-62.0		146.6	566.2	284.1	50.2	1.000033
56500.0	86.7	-61.6		142.9	566.6	284.0	49.3	1.000032
57000.0	84.5	-61.3		139.2	567.1	282.6	46.4	1.000031
57500.0	82.6	-60.9		135.6	567.5	269.4	32.4	1.000030
58000.0	80.6	-60.6		132.1	568.0	241.3	22.4	1.000029
58500.0	78.7	-60.3		128.7	568.4			1.000028
59000.0	76.8	-59.9		125.4	568.9			1.000027
59500.0	74.7	-59.6		122.2	569.3			1.000027
60000.0	73.1	-59.4		119.2	569.6			1.000027
60500.0	71.4	-59.2		116.2	569.9			1.000026
61000.0	69.7	-58.9		113.3	570.2			1.000025
61500.0	68.0	-58.6		110.5	570.6			1.000025
62000.0	66.4	-58.3		107.7	571.0			1.000024
62500.0	64.8	-58.0		105.0	571.4			1.000023
63000.0	63.3	-57.7		102.4	571.8			1.000023
63500.0	61.6	-57.4		99.8	572.2			1.000022

AX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

UPPER AIR DATA
3490010350
HOLLOMAN
TABLE 17
Cont'd

STATION ALTITUDE 4126.59 FEET MSL
15 DEC 62 0700 HRS MST
ASCENSION NO. 336

GEODLTIC COORDINATES
32.88865 LAT DEG
106.09965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TH)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	60.3	-57.1		97.3	572.6			1.000022
64500.0	58.9	-56.8		94.8	573.1			1.000021
65000.0	57.5	-56.5		92.5	573.5			1.000021
65500.0	56.2	-56.2		90.1	573.9			1.000020
66000.0	54.8	-56.1		88.0	574.0			1.000020
66500.0	53.5	-56.1		85.9	574.0			1.000019
67000.0	52.3	-56.1		83.9	574.0			1.000019
67500.0	51.0	-56.1		81.9	574.0			1.000018
68000.0	49.7	-56.1		80.0	573.9			1.000018
68500.0	48.4	-56.2		78.1	573.9			1.000017
69000.0	47.5	-56.2		76.3	573.8			1.000017
69500.0	46.4	-56.3		74.5	573.7			1.000017
70000.0	45.3	-56.4		72.8	573.6			1.000016
70500.0	44.2	-56.4		71.1	573.5			1.000016
71000.0	43.2	-56.5		69.5	573.5			1.000015
71500.0	42.2	-56.5		67.8	573.4			1.000015
72000.0	41.2	-56.6		66.3	573.3			1.000015
72500.0	40.2	-56.7		64.7	573.2			1.000014
73000.0	39.3	-56.7		63.2	573.1			1.000014
73500.0	38.3	-56.8		61.7	573.0			1.000014
74000.0	37.4	-56.8		60.3	573.0			1.000013
74500.0	36.6	-56.9		58.9	572.9			1.000013
75000.0	35.7	-57.0		57.5	572.8			1.000013
75500.0	34.9	-56.7		56.1	573.2			1.000012
76000.0	34.0	-56.0		54.6	574.1			1.000012
76500.0	33.3	-55.4		53.2	574.9			1.000012
77000.0	32.5	-54.7		51.6	575.7			1.000012
77500.0	31.7	-54.1		50.4	576.6			1.000011
78000.0	31.0	-53.5		49.1	577.4			1.000011
78500.0	30.3	-52.8		47.8	578.3			1.000011
79000.0	29.5	-52.6		46.7	578.6			1.000010
79500.0	28.9	-52.5		45.6	578.7			1.000010
80000.0	28.2	-52.4		44.5	578.8			1.000010
80500.0	27.6	-52.4		43.5	578.9			1.000010
81000.0	26.9	-52.3		42.5	579.0			1.000009
81500.0	26.3	-52.2		41.5	579.1			1.000009
82000.0	25.7	-52.2		40.5	579.1			1.000009
82500.0	25.1	-52.1		39.5	579.2			1.000009
83000.0	24.5	-52.0		38.6	579.3			1.000009
83500.0	24.0	-52.0		37.7	579.4			1.000008

XX WIND DATA INVALID, UP TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4126.59 FEET MSL
15 DEC. 62 0700 HRS PST
ASCESSION NO. 336

UPPER AIR DATA
3490010330
HOLLOMAN

GEODETIC COORDINATES
32.68865 LAT DEG
106.09965 LONG DEG

TABLE 17

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	COPT'D DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEG) SPEED (KNOTS)	INDEX OF REFRACTION
84000.0	23.4	-51.9		30.8	579.5	80.7	1.000008
84500.0	22.9	-51.8		36.0	579.6	82.2	1.000008
85000.0	22.3	-51.7		35.1	579.7	77.0	1.000008
85500.0	21.8	-51.7		34.3	579.8	79.3	1.000008
86000.0	21.3	-51.6		33.5	579.9	82.0	1.000007
86500.0	20.8	-50.7		32.0	581.0	85.0	1.000007
87000.0	20.3	-49.6		31.7	582.5	86.3	1.000007
87500.0	19.9	-48.6		30.8	583.8	88.0	1.000007
88000.0	19.4	-48.1		30.1	584.5	90.9	1.000007
88500.0	19.0	-47.5		29.3	585.2	81.8	1.000007
89000.0	18.6	-47.0		28.6	585.8	65.0	1.000006
89500.0	18.2	-46.5		27.9	586.5	44.1	1.000006
90000.0	17.7	-46.0		27.2	587.2	31.4	1.000006
90500.0	17.3	-45.5		26.5	587.8	30.9	1.000006
91000.0	17.0	-45.0		25.9	588.5	30.5	1.000006
91500.0	16.6	-45.0		25.3	588.4	30.2	1.000006
92000.0	16.2	-45.1		24.8	588.3	30.0	1.000006
92500.0	15.8	-45.3		24.2	588.1	30.0	1.000005
93000.0	15.5	-45.4		23.7	587.9	30.0	1.000005
93500.0	15.1	-45.5		23.2	587.8	29.9	1.000005
94000.0	14.8	-45.7		22.7	587.6	29.3	1.000005
94500.0	14.5	-45.8		22.2	587.4	27.7	1.000005
95000.0	14.1	-45.9		21.7	587.3	25.9	1.000005
95500.0	13.8	-46.0		21.2	587.1	23.9	1.000005
96000.0	13.5	-46.2		20.7	586.9	22.3	1.000005
96500.0	13.2	-46.3		20.3	586.8	20.9	1.000005
97000.0	12.9	-46.4		19.8	586.6	18.6	1.000004
97500.0	12.6	-46.6		19.4	586.4	14.0	1.000004
98000.0	12.3	-46.7		19.0	586.3	35.2	1.000004
98500.0	12.1	-46.7		18.0	586.2	256.5	1.000004
99000.0	11.8	-45.9		18.1	587.3	241.5	1.000004
99500.0	11.5	-45.1		17.6	588.3	236.5	1.000004
100000.0	11.3	-44.3		17.2	589.4	239.5	1.000004
100500.0	11.0	-43.5		16.7	590.4	247.5	1.000004
101000.0	10.8	-42.6		16.3	591.5	253.1	1.000004
101500.0	10.5	-41.8		15.9	592.5	257.1	1.000004
102000.0	10.3	-41.0		15.5	593.6	260.1	1.000003
102500.0	10.1	-40.2		15.1	594.6	262.9	1.000003
103000.0	9.9	-39.9		14.7	595.0	265.0	1.000003
103500.0	9.6	-39.8		14.4	595.1	269.2	1.000003

STATION ALTITUDE 1126.59 FEET MS.	UPPER AIR DATA	GEODETIC COORDINATES
15 DEC. 62	3490010336	32.88865 LAT DEG
ASCENSION 40. 33.	HOLLOWMAN	106.09965 LONG DEG

TABLE 17		WIND DATA		INDEX	
Cont'd		DIRECTION	SPEED	OF	
		DEGREES (TN)	KNOTS	REFRACTION	
GEOMETRIC ALTITUDE	PRESSURE	TEMPERATURE	REL. HUM.	DENSITY	SPEED OF
MSL FEET	MILLIBARS	AIR DEGREE	PERCENT	GM/CUBIC	SOUND
		DEGREES CELSIUS		METER	KNOTS
104000.0	9.4	-39.8		14.1	595.1
104500.0	9.2	-39.8		13.8	595.1
105000.0	9.0	-39.7		13.5	595.2
105500.0	8.8	-39.7		13.2	595.2
106000.0	8.6	-39.7		12.9	595.3
106500.0	8.5	-39.6		12.6	595.3
					1.000003
					1.000003
					1.000003
					1.000003
					1.000003

STATION ALTITUDE 9126.59 FEET MS,
15 DEC. 62
ASCENDING NO. 556

MANDATORY LEVELS
3470010350
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LONG DEG

TABLE 18

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUMID.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	GEOPOTENTIAL CENTIGRADE		DIRECTION DEGREES (TRUE)	SPEED KNOTS
850.0	5108.	4.3	-11.7	30.	3.5	0.3
800.0	6723.	2.8	-16.3	23.	4.7	9.4
750.0	8426.	-3	-17.5	26.	322.9	9.0
700.0	10230.	-1.9	-19.7	24.	305.4	19.4
650.0	12156.	-3.7	-23.1	20.	316.5	25.0
600.0	14217.	-7.0	-24.3	24.	310.1	26.2
550.0	16428.	-10.8	-25.6	26.	309.4	32.4
500.0	18809.	-16.0	-30.2	28.	304.3	33.1
450.0	21388.	-21.3	-36.7	23.	310.2	39.6
400.0	24200.	-28.3	-42.5	24.	329.9	47.0
350.0	27296.	-35.4	-49.0	23.	331.9	51.2
300.0	30754.	-44.2			334.0	56.4
250.0	34671.	-54.6			327.1	64.2
200.0	39251.	-62.2			304.5	67.8
175.0	41984.	-59.3			291.8	63.9
150.0	45151.	-57.3			285.6	40.9
125.0	48909.	-60.8			280.0	35.9
100.0	53431.	-63.6			282.8	43.6
80.0	57958.	-60.5			999.0	999.0XX
70.0	60697.	-59.0			999.0	999.0XX
60.0	63885.	-57.0			999.0	999.0XX
50.0	67684.	-56.1			231.2	8.7
40.0	72333.	-56.7			302.3	14.1
30.0	78345.	-52.6			12.0	9.7
25.0	82213.	-52.1			94.3	25.2
20.0	86962.	-48.7			87.4	11.8
15.0	93244.	-45.6			29.9	9.4
10.0	102140.	-39.9			203.0	19.7

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

GEODETIC COORDINATES
32.400043 LAT DEG
106.370333 LON DEG

SIGNIFICANT LEVEL DATA
3490020619
WHITE SANDS

STATION ALTITUDE 3489.00 FEET MSL
15 DEC. 62
0030 HRS MST
ASCENSION NO. 619

TABLE 19

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
887.0	3989.0	-2.3	-2.8	96.0
883.8	4084.1	1.9	-8.2	47.0
873.2	4405.9	5.7	-11.8	27.0
857.3	4898.5	4.8	-15.1	22.0
850.0	5127.2	4.5	-14.3	24.0
815.9	6220.9	4.1	-17.4	19.0
795.7	6884.3	2.7	-19.9	17.0
717.5	9622.8	.1	-22.0	17.0
700.0	10270.5	-1.5	-24.0	16.0
661.3	11753.5	-3.2	-25.4	16.0
630.4	12996.2	-3.8	-25.2	17.0
580.3	15128.8	-7.8	-24.3	25.0
521.9	17614.2	-12.9	-31.1	20.0
500.0	18804.1	-15.3	-33.1	20.0
473.7	20219.0	-18.2	-35.1	21.0
457.9	21051.3	-18.9	-36.7	19.0
412.6	23569.0	-25.8	-42.3	19.0
400.0	24305.4	-27.8	-44.7	18.0
376.8	25708.6	-31.2	-48.6	16.0
355.0	27049.4	-34.7	-51.0	17.0
335.4	28382.6	-38.7	-53.9	18.0
300.0	30671.3	-44.8		
250.8	34389.0	-54.8		
235.4	36046.7	-55.6		
211.4	38250.7	-57.4		
204.4	38939.3	-62.9		
200.0	39383.0	-63.3		
191.5	40281.4	-60.5		
172.3	42460.4	-57.1		
157.0	44372.9	-60.7		
154.3	44729.6	-60.9		
150.0	45312.3	-59.5		
145.9	45981.6	-59.8		
137.5	47100.2	-61.1		
127.9	48592.4	-59.6		
123.9	49345.5	-59.8		
114.1	50930.4	-60.9		
105.5	52502.7	-62.1		
100.0	53570.0	-68.9		
		-62.5		

GEODETIC COORDINATES
32.40043 LAT DEG
106.57033 LON DEG

SIGNIFICANT LEVEL DATA

3490020519
WHITE SANDS

TABLE 19

Cont'd

STATION ALTITUDE 3490.00 FEET
15 DEC. 62
ASCENSION NO. 019

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
95.1 54598.9	-62.5		
89.7 55793.7	-60.9		
74.1 59712.4	-61.1		
70.0 60805.1	-59.1		
65.1 62384.3	-60.0		
59.5 64240.9	-57.7		
53.1 66621.1	-57.7		
50.0 67880.4	-55.9		
46.1 69582.1	-57.4		
35.1 75276.4	-57.4		
30.0 78591.6	-52.9		
24.3 83093.7	-52.4		
20.0 87332.6	-44.8		
18.7 88821.7	-44.5		
14.9 93826.4	-47.5		
11.6 99391.1	-40.7		
10.0 102733.2	-41.7		
7.7 108505.7	-43.5		

STATION ALTITUDE 5900.00 FEET MSL
15 DEC. 62
ASLENSION 110. 019

UPPLER AIR DATA
3490020019
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 20

GEODETIC ALTITUDE MSL (FT)	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEW POINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
3989.0	867.0	-2.3	-2.8	96.0	1130.4	641.8	105.0	1.000279
4000.0	866.6	-1.8	-3.2	90.3	1130.0	642.4	104.7	1.000276
4100.0	863.3	2.1	-8.3	46.0	1110.4	646.8	101.7	1.000265
4200.0	860.6	3.3	-9.1	39.8	1107.5	648.1	98.2	1.000262
4300.0	870.7	4.4	-10.2	33.6	1098.8	649.5	94.3	1.000259
4400.0	875.4	5.6	-11.7	27.4	1090.2	650.8	89.9	1.000255
4500.0	870.1	5.5	-12.4	26.0	1086.6	650.7	85.0	1.000254
4600.0	866.9	5.3	-13.0	25.0	1083.3	650.5	79.4	1.000252
4700.0	863.7	5.2	-13.7	24.0	1080.1	650.2	73.3	1.000251
4800.0	860.5	5.0	-14.4	23.0	1076.8	650.0	66.7	1.000250
4900.0	857.3	4.8	-15.1	22.0	1073.5	649.8	59.7	1.000248
5000.0	854.1	4.7	-14.7	22.9	1070.0	649.6	52.5	1.000248
5100.0	850.9	4.5	-14.4	23.8	1066.5	649.5	45.3	1.000247
5200.0	847.7	4.5	-14.5	23.7	1062.7	649.4	38.4	1.000247
5300.0	844.5	4.4	-14.7	23.2	1058.9	649.4	32.0	1.000245
5400.0	841.4	4.4	-15.0	22.8	1055.1	649.3	26.0	1.000244
5500.0	838.2	4.4	-15.3	22.3	1051.3	649.3	20.7	1.000243
5600.0	835.1	4.3	-15.6	21.8	1047.6	649.2	15.9	1.000242
5700.0	832.0	4.3	-15.8	21.4	1043.8	649.2	11.6	1.000241
5800.0	828.9	4.3	-16.1	20.9	1040.1	649.1	7.9	1.000240
5900.0	825.8	4.2	-16.4	20.5	1036.3	649.1	3.5	1.000239
6000.0	822.7	4.2	-16.7	20.0	1032.6	649.0	358.2	1.000238
6100.0	819.6	4.1	-17.0	19.6	1028.9	649.0	352.0	1.000237
6200.0	816.5	4.1	-17.3	19.1	1025.2	648.9	344.8	1.000236
6300.0	813.5	3.9	-17.7	18.8	1022.0	648.7	336.8	1.000235
6400.0	810.4	3.7	-18.1	18.5	1019.0	648.5	328.0	1.000234
6500.0	807.4	3.5	-18.4	18.2	1016.0	648.2	318.8	1.000233
6600.0	804.4	3.3	-18.8	17.9	1012.9	648.0	309.7	1.000233
6700.0	801.3	3.1	-19.2	17.6	1009.9	647.7	301.1	1.000232
6800.0	798.3	2.9	-19.5	17.3	1006.9	647.5	296.2	1.000231
6900.0	795.3	2.7	-19.9	17.0	1003.9	647.2	293.4	1.000230
7000.0	792.3	2.6	-20.0	17.0	1000.4	647.1	291.4	1.000229
7100.0	789.4	2.5	-20.0	17.0	997.0	647.0	289.8	1.000228
7200.0	786.4	2.4	-20.1	17.0	993.6	646.9	288.6	1.000227
7300.0	783.4	2.3	-20.2	17.0	990.2	646.8	287.6	1.000227
7400.0	780.4	2.2	-20.3	17.0	986.8	646.7	286.8	1.000226
7500.0	777.5	2.1	-20.3	17.0	983.4	646.5	286.1	1.000225
7600.0	774.6	2.0	-20.4	17.0	980.0	646.4	285.5	1.000224
7700.0	771.6	1.9	-20.5	17.0	976.7	646.3	285.7	1.000224
7800.0	768.7	1.8	-20.6	17.0	973.3	646.2	286.6	1.000223

STATION ALTITUDE 3939.00 F. T. L.SL
15 DEC. 82 0830 HRS MST
ASCLN 100. 619

UPPER AIR DATA
3490020619
WHITE SANDS
TABLE 20
Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	TEMPERATURE Dewpoint DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TH) SPEED (KNOTS)	INDEX OF REFRACTION
7900.0	765.8	1.7	-20.7	17.0	970.0	646.1	287.7	1.000222
8000.0	762.9	1.6	-20.7	17.0	960.6	646.0	288.6	1.000221
8100.0	760.0	1.5	-20.8	17.0	963.3	645.9	289.4	1.000220
8200.0	757.2	1.5	-20.9	17.0	960.0	645.8	290.1	1.000220
8300.0	754.3	1.4	-21.0	17.0	956.7	645.6	290.8	1.000219
8400.0	751.5	1.3	-21.0	17.0	953.4	645.5	291.4	1.000218
8500.0	748.6	1.2	-21.1	17.0	950.2	645.4	291.9	1.000217
8600.0	745.8	1.1	-21.2	17.0	946.9	645.3	292.4	1.000217
8700.0	743.0	1.0	-21.3	17.0	943.7	645.2	292.9	1.000216
8800.0	740.2	.9	-21.4	17.0	940.4	645.1	293.4	1.000215
8900.0	737.4	.8	-21.4	17.0	937.2	645.0	293.9	1.000214
9000.0	734.6	.7	-21.5	17.0	934.0	644.9	294.3	1.000214
9100.0	731.8	.6	-21.6	17.0	930.8	644.7	294.8	1.000213
9200.0	729.1	.5	-21.7	17.0	927.6	644.6	295.2	1.000212
9300.0	726.3	.4	-21.7	17.0	924.4	644.5	295.7	1.000211
9400.0	723.6	.3	-21.8	17.0	921.3	644.4	296.1	1.000211
9500.0	720.8	.2	-21.9	17.0	918.1	644.3	296.5	1.000210
9600.0	718.1	.1	-22.0	17.0	915.0	644.2	297.0	1.000209
9700.0	715.4	.1	-22.2	16.9	912.2	643.9	297.6	1.000208
9800.0	712.7	.3	-22.5	16.7	909.6	643.6	298.2	1.000208
9900.0	710.0	.6	-22.9	16.6	906.9	643.3	298.7	1.000207
10000.0	707.3	.8	-23.2	16.4	904.3	643.0	299.3	1.000206
10100.0	704.6	-1.1	-23.5	16.3	901.7	642.8	299.9	1.000205
10200.0	701.9	-1.3	-23.8	16.1	899.1	642.5	300.4	1.000205
10300.0	699.2	-1.5	-24.0	16.0	896.4	642.2	300.9	1.000204
10400.0	696.5	-1.6	-24.1	16.0	893.3	642.1	301.5	1.000203
10500.0	693.9	-1.8	-24.2	16.0	890.3	641.9	302.1	1.000203
10600.0	691.2	-1.9	-24.3	16.0	887.2	641.8	304.0	1.000202
10700.0	688.6	-2.0	-24.4	16.0	884.2	641.7	305.8	1.000201
10800.0	685.9	-2.1	-24.5	16.0	881.2	641.5	307.4	1.000201
10900.0	683.3	-2.2	-24.6	16.0	878.2	641.4	308.9	1.000200
11000.0	680.7	-2.3	-24.7	16.0	875.2	641.3	310.2	1.000199
11100.0	678.1	-2.5	-24.8	16.0	872.2	641.1	311.5	1.000199
11200.0	675.5	-2.6	-24.9	16.0	869.3	641.0	312.7	1.000198
11300.0	672.9	-2.7	-25.0	16.0	866.3	640.8	313.8	1.000197
11400.0	670.3	-2.8	-25.1	16.0	863.4	640.7	314.7	1.000196
11500.0	667.8	-2.9	-25.1	16.0	860.4	640.6	314.7	1.000196
11600.0	665.2	-3.0	-25.2	16.0	857.5	640.4	314.8	1.000195
11700.0	662.7	-3.1	-25.3	16.0	854.6	640.3	314.9	1.000194
11800.0	660.1	-3.2	-25.4	16.0	851.6	640.2	314.9	1.000194

STATION ALTITUDE 3939.00 FEET
 15 DEC. 62
 ASCENDING NO. 619

UPPER AIR DATA
 3490020019
 WHITE SANDS
 TABLE 20
 Cont'd

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
11900.0	657.0	-3.3	315.0	22.2	1.000143
12000.0	655.1	-3.3	315.0	22.6	1.000192
12100.0	652.5	-3.4	315.1	23.0	1.000192
12200.0	650.3	-3.4	315.1	23.3	1.000191
12300.0	647.5	-3.5	315.2	23.7	1.000190
12400.0	645.0	-3.5	314.7	23.7	1.000190
12500.0	642.6	-3.6	314.1	23.6	1.000189
12600.0	640.1	-3.6	313.5	23.5	1.000188
12700.0	637.6	-3.7	312.8	23.4	1.000188
12800.0	635.2	-3.7	312.2	23.3	1.000187
12900.0	632.7	-3.8	311.6	23.2	1.000186
13000.0	630.3	-3.8	310.9	23.2	1.000186
13100.0	627.9	-4.0	310.3	23.1	1.000185
13200.0	625.4	-4.2	309.6	23.0	1.000185
13300.0	623.0	-4.4	309.1	23.0	1.000184
13400.0	620.6	-4.6	309.1	23.3	1.000183
13500.0	618.2	-4.7	309.1	23.6	1.000183
13600.0	615.8	-4.9	309.1	23.9	1.000182
13700.0	613.4	-5.1	309.0	24.1	1.000182
13800.0	611.0	-5.3	309.0	24.4	1.000181
13900.0	608.7	-5.5	309.0	24.7	1.000181
14000.0	606.3	-5.7	309.0	25.0	1.000180
14100.0	604.0	-5.9	309.0	25.3	1.000180
14200.0	601.6	-6.1	309.0	25.6	1.000179
14300.0	599.3	-6.2	309.0	25.9	1.000179
14400.0	597.0	-6.4	308.9	26.2	1.000178
14500.0	594.6	-6.6	308.8	26.5	1.000178
14600.0	592.3	-6.8	308.7	26.8	1.000177
14700.0	590.0	-7.0	308.6	27.1	1.000176
14800.0	587.8	-7.2	308.4	27.4	1.000176
14900.0	585.5	-7.4	308.3	27.7	1.000175
15000.0	583.2	-7.6	308.2	28.0	1.000175
15100.0	580.9	-7.7	308.1	28.3	1.000174
15200.0	578.7	-7.9	308.1	28.6	1.000174
15300.0	576.4	-8.1	308.0	28.9	1.000173
15400.0	574.1	-8.3	307.7	29.1	1.000172
15500.0	571.9	-8.5	307.1	29.0	1.000172
15600.0	569.6	-8.7	306.5	28.8	1.000171
15700.0	567.4	-8.9	305.9	28.7	1.000171
15800.0	565.1	-9.1	305.3	28.6	1.000170

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

UPPER AIR DATA
3490020019
WHITE SANDS

TABLE 20
Cont'd

STATION ALTITUDE 3499.00 FEET MSL
15 DEC. 62
0830 HRS MST
ASCENDING NO. 019

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (DEGREES TRUE)	SPEED KNOTS	INDEX OF REFRACTION
15900.0	562.9	-9.3	23.6	742.7	333.0	304.7	28.5	1.000169
16000.0	560.7	-9.5	23.4	740.4	332.8	304.1	28.4	1.000169
16100.0	558.5	-9.6	23.2	738.0	332.5	303.5	28.3	1.000168
16200.0	556.3	-9.8	23.0	735.6	332.3	302.9	28.2	1.000167
16300.0	554.1	-10.0	22.8	733.2	332.1	302.2	28.2	1.000167
16400.0	551.9	-10.2	22.6	730.9	331.8	301.7	28.1	1.000166
16500.0	549.7	-10.4	22.4	728.5	331.6	302.0	28.1	1.000166
16600.0	547.5	-10.6	22.3	726.2	331.4	302.2	28.1	1.000165
16700.0	545.3	-10.8	22.1	723.9	331.2	302.4	28.1	1.000164
16800.0	543.2	-11.0	21.9	721.5	330.9	302.7	28.1	1.000164
16900.0	541.1	-11.2	21.7	719.2	330.7	302.9	28.2	1.000163
17000.0	539.0	-11.4	21.5	716.9	330.5	303.2	28.2	1.000163
17100.0	536.8	-11.5	21.3	714.6	330.2	303.4	28.2	1.000162
17200.0	534.7	-11.7	21.1	712.3	330.0	303.7	28.2	1.000162
17300.0	532.6	-11.9	21.0	710.0	329.8	303.9	28.2	1.000161
17400.0	530.5	-12.1	20.8	707.7	329.5	304.1	28.2	1.000160
17500.0	528.4	-12.3	20.6	705.5	329.3	304.7	28.5	1.000160
17600.0	526.3	-12.5	20.4	703.2	329.1	305.3	28.7	1.000159
17700.0	524.3	-12.7	20.2	700.9	328.8	305.9	29.0	1.000159
17800.0	522.2	-12.9	20.0	698.7	328.6	306.4	29.3	1.000158
17900.0	520.1	-13.1	20.0	696.5	328.3	307.0	29.5	1.000158
18000.0	518.0	-13.3	20.0	694.3	328.1	307.5	29.8	1.000157
18100.0	516.0	-13.5	20.0	692.1	327.8	308.0	30.1	1.000157
18200.0	513.9	-13.8	20.0	690.0	327.5	308.6	30.4	1.000156
18300.0	511.8	-14.0	20.0	687.8	327.3	309.1	30.6	1.000156
18400.0	509.6	-14.2	20.0	685.7	327.0	309.6	30.9	1.000155
18500.0	507.5	-14.4	20.0	683.5	326.7	309.9	31.6	1.000155
18600.0	505.7	-14.7	20.0	681.4	326.4	310.1	32.2	1.000154
18700.0	503.7	-14.9	20.0	679.2	326.2	310.4	32.9	1.000153
18800.0	501.7	-15.1	20.0	677.1	325.9	310.6	33.5	1.000153
18900.0	499.7	-15.3	20.0	675.0	325.6	310.9	34.2	1.000152
19000.0	497.7	-15.6	20.1	672.8	325.4	311.1	34.8	1.000152
19100.0	495.7	-15.8	20.2	670.7	325.1	311.3	35.5	1.000151
19200.0	493.6	-16.0	20.2	668.5	324.8	311.6	36.1	1.000151
19300.0	491.7	-16.2	20.3	666.4	324.6	311.8	36.8	1.000150
19400.0	489.7	-16.4	20.4	664.3	324.3	312.0	37.4	1.000150
19500.0	487.7	-16.6	20.5	662.2	324.1	312.8	38.0	1.000149
19600.0	485.7	-16.9	20.5	660.0	323.8	313.5	38.6	1.000149
19700.0	483.9	-17.1	20.6	657.9	323.5	314.2	39.2	1.000148
19800.0	481.8	-17.3	20.7	655.8	323.2	314.9	39.8	1.000148

GEODLTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

UPPER AIR DATA
3490020619
WHITE SANDS
TABLE 20
Cont'd

STATION ALTITUDE 349.00 FLT MSL
15 DEC 62 0830 HRS MST
ASL 100. 019

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES (TN))	SPEED KNOTS	INDEX OF REFRACTION
1900.0	474.9	-17.5	20.8	653.7	623.0	315.0	40.4	1.000147
2000.0	477.9	-17.7	20.8	651.7	622.7	316.3	41.0	1.000147
2100.0	470.0	-17.9	20.9	649.0	622.4	316.9	41.6	1.000146
2200.0	474.1	-18.2	21.0	647.5	622.2	317.5	42.2	1.000146
2300.0	472.1	-18.3	20.8	645.2	622.0	318.1	42.8	1.000145
2400.0	470.2	-18.4	20.6	642.7	621.9	318.7	43.4	1.000145
2500.0	468.3	-18.4	20.3	640.3	621.8	319.3	44.0	1.000144
2600.0	466.4	-18.5	20.1	637.9	621.7	319.7	44.2	1.000144
2700.0	464.5	-18.6	19.8	635.6	621.6	320.1	44.4	1.000143
2800.0	462.6	-18.7	19.6	633.2	621.5	320.5	44.6	1.000143
2900.0	460.7	-18.8	19.4	630.8	621.4	321.0	44.7	1.000142
3000.0	458.9	-18.9	19.1	628.5	621.3	321.4	44.9	1.000142
3100.0	457.0	-19.0	19.0	626.3	621.1	321.8	45.1	1.000141
3200.0	455.1	-19.3	19.0	624.4	620.8	322.2	45.3	1.000141
3300.0	453.2	-19.6	19.0	622.5	620.6	322.6	45.5	1.000140
3400.0	451.3	-19.9	19.0	620.6	620.1	323.0	45.7	1.000140
3500.0	449.5	-20.1	19.0	618.7	619.7	323.4	45.9	1.000139
3600.0	447.6	-20.4	19.0	616.8	619.4	323.7	46.1	1.000139
3700.0	445.8	-20.7	19.0	615.0	619.1	323.7	46.2	1.000138
3800.0	443.9	-21.0	19.0	613.1	618.7	323.7	46.3	1.000138
3900.0	442.1	-21.2	19.0	611.2	618.4	323.7	46.4	1.000137
4000.0	440.3	-21.5	19.0	609.4	618.1	323.7	46.5	1.000137
4100.0	438.5	-21.8	19.0	607.5	617.7	323.7	46.6	1.000137
4200.0	436.6	-22.0	19.0	605.7	617.4	323.8	46.7	1.000136
4300.0	434.0	-22.3	19.0	603.8	617.0	323.8	46.8	1.000136
4400.0	433.0	-22.6	19.0	602.0	616.7	323.8	46.9	1.000135
4500.0	431.3	-22.9	19.0	600.2	616.4	323.8	47.0	1.000135
4600.0	429.5	-23.1	19.0	598.4	616.0	323.8	47.1	1.000134
4700.0	427.7	-23.4	19.0	596.5	615.7	323.9	47.1	1.000134
4800.0	425.9	-23.7	19.0	594.7	615.4	323.9	47.1	1.000134
4900.0	424.2	-24.0	19.0	592.9	615.0	323.9	47.1	1.000133
5000.0	422.4	-24.2	19.0	591.1	614.7	323.9	47.1	1.000133
5100.0	420.7	-24.5	19.0	589.3	614.3	323.9	47.1	1.000132
5200.0	418.9	-24.8	19.0	587.6	614.0	323.9	47.1	1.000132
5300.0	417.2	-25.1	19.0	585.8	613.7	323.9	47.1	1.000131
5400.0	415.5	-25.3	19.0	584.0	613.3	323.9	47.0	1.000131
5500.0	413.8	-25.6	19.0	582.2	613.0	323.9	47.0	1.000131
5600.0	412.1	-25.9	19.0	580.3	612.6	323.9	47.0	1.000130
5700.0	410.3	-26.2	18.8	578.7	612.3	323.9	47.0	1.000130
5800.0	408.6	-26.4	18.7	576.9	612.0	323.9	46.9	1.000129

STATION ALTITUDE 34900.00 FEET SL
 15 DEC. 62 0830 HRS MST
 ASLENSION NO. 019

UPPER AIR DATA
 3490000619
 WHITE SANDS
 TABLE 20
 Cont'd

GEODETIC COORDINATES
 32.40043 LAT N 66
 106.37033 LONG W

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEW POINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
23900.0	400.9	-26.7	-43.5	18.6	575.1	611.6	323.8	1.000129
24000.0	405.2	-27.0	-43.8	18.4	573.3	611.3	323.8	1.000128
24100.0	403.5	-27.2	-44.1	18.3	571.5	610.9	323.8	1.000128
24200.0	401.8	-27.5	-44.4	18.1	569.7	610.6	323.8	1.000128
24300.0	400.1	-27.8	-44.7	18.0	568.0	610.3	323.8	1.000127
24400.0	398.4	-28.0	-44.9	17.9	566.1	610.0	323.7	1.000127
24500.0	396.7	-28.3	-45.2	17.7	564.3	609.7	323.7	1.000126
24600.0	395.0	-28.5	-45.5	17.6	562.5	609.4	323.7	1.000126
24700.0	393.3	-28.8	-45.8	17.4	560.6	609.1	323.7	1.000125
24800.0	391.7	-29.0	-46.1	17.3	558.8	608.8	323.8	1.000125
24900.0	390.0	-29.2	-46.3	17.2	557.0	608.5	323.9	1.000125
25000.0	388.3	-29.5	-46.6	17.0	555.2	608.2	324.0	1.000124
25100.0	386.7	-29.7	-46.9	16.9	553.3	607.8	324.2	1.000124
25200.0	385.0	-30.0	-47.2	16.7	551.5	607.5	324.3	1.000123
25300.0	383.4	-30.2	-47.4	16.6	549.8	607.2	324.4	1.000123
25400.0	381.8	-30.5	-47.7	16.4	548.0	606.9	324.5	1.000123
25500.0	380.2	-30.7	-48.0	16.3	546.2	606.6	324.6	1.000122
25600.0	378.5	-30.9	-48.3	16.2	544.4	606.3	324.7	1.000122
25700.0	376.9	-31.2	-48.6	16.0	542.6	606.0	324.8	1.000121
25800.0	375.3	-31.4	-48.8	16.1	540.9	605.7	324.8	1.000121
25900.0	373.7	-31.7	-48.9	16.1	539.1	605.4	324.9	1.000121
26000.0	372.1	-32.0	-49.1	16.2	537.4	605.0	324.9	1.000120
26100.0	370.5	-32.2	-49.3	16.3	535.7	604.7	325.0	1.000120
26200.0	368.9	-32.5	-49.5	16.4	533.9	604.4	325.0	1.000119
26300.0	367.3	-32.7	-49.7	16.4	532.2	604.1	325.1	1.000119
26400.0	365.7	-33.0	-49.8	16.5	530.5	603.7	325.1	1.000119
26500.0	364.1	-33.3	-50.0	16.6	528.8	603.4	325.2	1.000118
26600.0	362.6	-33.5	-50.2	16.7	527.1	603.1	325.2	1.000118
26700.0	361.0	-33.8	-50.4	16.7	525.4	602.7	325.3	1.000117
26800.0	359.5	-34.0	-50.6	16.8	523.7	602.4	324.9	1.000117
26900.0	357.9	-34.3	-50.7	16.9	522.0	602.1	324.6	1.000117
27000.0	356.4	-34.6	-50.9	17.0	520.3	601.8	324.3	1.000116
27100.0	354.8	-34.9	-51.1	17.0	518.7	601.4	323.9	1.000116
27200.0	353.3	-35.2	-51.3	17.1	517.0	601.0	323.6	1.000116
27300.0	351.7	-35.5	-51.6	17.2	515.4	600.6	323.3	1.000115
27400.0	350.2	-35.8	-51.8	17.3	513.8	600.3	323.0	1.000115
27500.0	348.6	-36.1	-52.0	17.3	512.2	599.9	322.6	1.000114
27600.0	347.1	-36.4	-52.2	17.4	510.6	599.5	322.3	1.000114
27700.0	345.6	-36.7	-52.4	17.5	509.0	599.1	322.0	1.000114
27800.0	344.1	-37.0	-52.7	17.6	507.5	598.7	321.7	1.000113

STATION ALTITUDE 3999.00 FEET MSL
15 DEC. 82 0830 HRS MST
ASCUSSION NO. 019

UPPER AIR DATA
3490020619
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 20

Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
27900.0	342.6	-37.3	17.6	505.9	598.4	321.2	1.000113
28000.0	341.1	-37.6	17.7	504.3	598.0	320.7	1.000113
28100.0	339.6	-37.9	17.8	502.7	597.6	320.2	1.000112
28200.0	338.1	-38.2	17.9	501.2	597.2	319.7	1.000112
28300.0	336.5	-38.5	17.9	499.6	596.8	319.2	1.000112
28400.0	335.1	-38.7	17.9**	498.0	596.5	318.7	1.000111
28500.0	333.6	-39.0	17.2**	496.3	596.2	318.2	1.000111
28600.0	332.1	-39.2	16.4**	494.6	595.8	317.7	1.000110
28700.0	330.7	-39.5	15.7**	492.9	595.5	317.2	1.000110
28800.0	329.2	-39.7	15.0**	491.3	595.2	316.7	1.000110
28900.0	327.7	-40.0	14.3**	489.6	594.9	316.5	1.000109
29000.0	326.2	-40.2	13.5**	487.9	594.6	316.5	1.000109
29100.0	324.6	-40.5	12.8**	486.2	594.3	316.5	1.000108
29200.0	323.3	-40.7	12.1**	484.6	594.0	316.5	1.000108
29300.0	321.9	-40.9	11.4**	482.9	593.7	316.5	1.000108
29400.0	320.4	-41.2	10.6**	481.3	593.3	316.6	1.000107
29500.0	319.0	-41.4	9.9**	479.6	593.0	316.6	1.000107
29600.0	317.6	-41.7	9.2**	478.0	592.7	316.6	1.000107
29700.0	316.2	-41.9	8.5**	476.3	592.4	316.6	1.000106
29800.0	314.8	-42.2	7.7**	474.7	592.1	316.6	1.000106
29900.0	313.3	-42.4	7.0**	473.1	591.8	316.7	1.000105
30000.0	311.9	-42.7	6.3**	471.5	591.5	317.1	1.000105
30100.0	310.6	-42.9	5.6**	469.9	591.1	317.5	1.000105
30200.0	309.2	-43.2	4.9**	468.3	590.8	317.8	1.000104
30300.0	307.8	-43.4	4.1**	466.7	590.5	318.2	1.000104
30400.0	306.4	-43.6	3.4**	465.1	590.2	318.6	1.000104
30500.0	305.0	-43.9	2.7**	463.5	589.9	318.9	1.000103
30600.0	303.7	-44.1	2.0**	461.9	589.6	319.3	1.000103
30700.0	302.3	-44.4	1.2**	460.4	589.2	319.6	1.000103
30800.0	301.0	-44.6	.5**	458.8	588.9	320.0	1.000102
30900.0	299.6	-44.9		457.2	588.6	320.3	1.000102
31000.0	298.2	-45.2		455.7	588.2	320.7	1.000101
31100.0	296.8	-45.5		454.1	587.9	321.0	1.000101
31200.0	295.5	-45.7		452.6	587.5	321.4	1.000101
31300.0	294.1	-46.0		451.1	587.1	321.7	1.000100
31400.0	292.7	-46.3		449.5	586.8	322.0	1.000100
31500.0	291.4	-46.6		448.0	586.4	322.4	1.000100
31600.0	290.0	-46.9		446.5	586.0	322.7	1.000099
31700.0	288.7	-47.2		445.0	585.7	323.0	1.000099
31800.0	287.3	-47.4		443.5	585.3	323.3	1.000099

** AT LEAST ONE UNCOMPUTED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 309.00 FEET MSL
15 DEC. 62 0830 HRS MST
ASCENSION NO. 019

UPPER AIR DATA
3400020019
WHITE SANDS
TABLE 20
Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM./CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
31900.0	280.6	-47.7		442.0	504.9	323.6	1.000098
32000.0	284.7	-46.0		440.5	504.6	323.7	1.000098
32100.0	285.4	-46.3		439.0	504.2	323.8	1.000098
32200.0	282.1	-48.6		437.5	503.8	323.7	1.000097
32300.0	280.7	-48.9		436.1	503.4	324.1	1.000097
32400.0	279.4	-49.1		434.6	503.1	324.2	1.000097
32500.0	278.2	-49.4		433.1	502.7	324.3	1.000096
32600.0	276.9	-49.7		431.7	502.3	324.4	1.000096
32700.0	275.6	-50.0		430.2	502.0	324.5	1.000096
32800.0	274.3	-50.3		428.8	501.6	324.6	1.000096
32900.0	273.0	-50.6		427.3	501.2	324.7	1.000095
33000.0	271.8	-50.9		425.9	500.8	324.6	1.000095
33100.0	270.5	-51.1		424.5	500.5	324.6	1.000095
33200.0	269.3	-51.4		423.0	500.1	324.5	1.000094
33300.0	268.0	-51.7		421.6	579.7	324.4	1.000094
33400.0	266.8	-52.0		420.2	579.4	324.3	1.000094
33500.0	265.5	-52.3		418.8	579.0	324.3	1.000093
33600.0	264.3	-52.6		417.4	578.6	324.2	1.000093
33700.0	263.1	-52.8		416.0	578.2	324.1	1.000093
33800.0	261.9	-53.1		414.6	577.9	324.1	1.000092
33900.0	260.7	-53.4		413.2	577.5	324.0	1.000092
34000.0	259.4	-53.7		411.8	577.1	323.5	1.000092
34100.0	258.2	-54.0		410.5	576.8	323.1	1.000091
34200.0	257.0	-54.3		409.1	576.4	322.8	1.000091
34300.0	255.9	-54.5		407.7	576.0	322.1	1.000091
34400.0	254.7	-54.8		406.3	575.6	321.6	1.000091
34500.0	253.5	-55.0		404.8	575.4	321.1	1.000090
34600.0	252.3	-55.2		403.2	575.1	320.6	1.000090
34700.0	251.1	-55.4		401.7	574.8	320.1	1.000089
34800.0	249.9	-55.6		400.1	574.6	319.5	1.000089
34900.0	248.7	-55.8		398.5	574.4	319.0	1.000089
35000.0	247.5	-55.9		396.9	574.2	318.3	1.000088
35100.0	246.3	-56.0		395.2	574.0	317.5	1.000088
35200.0	245.1	-56.2		393.6	573.8	316.7	1.000088
35300.0	244.0	-56.3		392.0	573.6	315.9	1.000087
35400.0	242.8	-56.5		390.4	573.5	315.1	1.000087
35500.0	241.6	-56.6		388.8	573.3	314.3	1.000087
35600.0	240.5	-56.8		387.2	573.1	313.4	1.000086
35700.0	239.3	-56.9		385.6	572.9	312.6	1.000086
35800.0	238.2	-57.0		384.0	572.7	311.7	1.000086

STATION ALTITUDE 3000.00 FEET MSL,
15 DEC. 62 0830 HRS MSL
ASCENSION NO. 019

UPPER AIR DATA
3400020019
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 20

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	CONT'D		WIND DATA DIRECTION DEGREES (TR)	SPEED KNOTS	INDEX OF REFRACTION
				DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS			
35900.0	237.1	-57.2		382.4	572.5	310.8	53.6	1.000085
36000.0	235.9	-57.3		380.8	572.3	310.0	53.6	1.000085
36100.0	234.8	-57.5		379.3	572.1	309.2	53.9	1.000084
36200.0	233.7	-57.8		377.9	571.7	308.3	54.1	1.000084
36300.0	232.5	-58.0		376.5	571.4	307.5	54.4	1.000084
36400.0	231.4	-58.3		375.1	571.1	306.7	54.6	1.000084
36500.0	230.3	-58.5		373.8	570.7	305.9	54.9	1.000083
36600.0	229.1	-58.8		372.4	570.4	305.1	55.2	1.000083
36700.0	228.0	-59.0		371.0	570.1	304.4	55.5	1.000083
36800.0	226.9	-59.3		369.6	569.7	303.6	55.8	1.000082
36900.0	225.8	-59.5		368.3	569.4	302.8	56.1	1.000082
37000.0	224.7	-59.8		366.9	569.1	302.2	56.5	1.000082
37100.0	223.6	-60.0		365.5	568.7	301.5	57.0	1.000081
37200.0	222.6	-60.3		364.2	568.4	300.9	57.4	1.000081
37300.0	221.5	-60.5		362.9	568.1	300.3	57.9	1.000081
37400.0	220.4	-60.8		361.5	567.7	299.7	58.4	1.000081
37500.0	219.3	-61.0		360.2	567.4	299.2	58.9	1.000080
37600.0	218.3	-61.3		358.9	567.1	298.6	59.3	1.000080
37700.0	217.2	-61.5		357.5	566.7	298.0	59.8	1.000080
37800.0	216.2	-61.8		356.2	566.4	297.5	60.3	1.000079
37900.0	215.1	-62.0		354.9	566.1	296.9	60.8	1.000079
38000.0	214.1	-62.3		353.6	565.7	296.7	61.2	1.000079
38100.0	213.0	-62.5		352.3	565.4	296.7	61.6	1.000078
38200.0	212.0	-62.8		351.0	565.1	296.7	61.9	1.000078
38300.0	210.9	-62.9		349.6	564.9	296.7	62.2	1.000078
38400.0	209.9	-63.0		347.9	564.8	296.6	62.5	1.000078
38500.0	208.9	-63.0		346.3	564.7	296.6	62.9	1.000077
38600.0	207.9	-63.1		344.7	564.6	296.6	63.2	1.000077
38700.0	206.8	-63.2		343.1	564.5	296.6	63.5	1.000076
38800.0	205.8	-63.2		341.5	564.5	296.6	63.9	1.000076
38900.0	204.8	-63.3		339.9	564.4	296.6	64.2	1.000076
39000.0	203.8	-62.9		337.7	564.9	296.6	64.2	1.000075
39100.0	202.8	-62.3		335.0	565.7	296.6	64.1	1.000075
39200.0	201.8	-61.7		332.4	566.6	296.6	64.0	1.000074
39300.0	200.8	-61.0		329.8	567.4	296.5	64.0	1.000073
39400.0	199.8	-60.4		327.3	568.2	296.5	63.9	1.000073
39500.0	198.9	-60.1		325.1	568.7	296.5	63.8	1.000072
39600.0	197.9	-59.7		323.0	569.2	296.5	63.7	1.000072
39700.0	197.0	-59.3		320.8	569.7	296.5	63.6	1.000071
39800.0	196.0	-58.9		318.7	570.2	296.5	63.5	1.000071

STATION ALTITUDE 3009.000 Feet MSL
15 DEC. 82 0830 HRS, MDT
ASCENSION IS. 019

WINDY AIR DATA
3490020019
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT N
106.37033 LONG W

TABLE 20

Cont'd

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
39900.0	195.1	-58.5		310.6	570.7	296.5	63.4	1.000071
40000.0	194.1	-58.2		314.6	571.2	296.4	63.3	1.000070
40100.0	193.2	-57.9		312.5	571.7	296.2	63.3	1.000070
40200.0	192.3	-57.4		310.4	572.2	296.0	63.2	1.000069
40300.0	191.3	-57.1		308.5	572.6	295.8	63.1	1.000069
40400.0	190.4	-57.3		307.3	572.4	295.6	63.0	1.000068
40500.0	189.5	-57.5		306.0	572.2	295.5	63.0	1.000068
40600.0	188.6	-57.6		304.8	571.9	295.3	62.9	1.000068
40700.0	187.7	-57.8		303.6	571.7	295.1	62.8	1.000068
40800.0	186.8	-58.0		302.3	571.5	294.9	62.8	1.000067
40900.0	185.9	-58.1		301.1	571.3	294.7	62.7	1.000067
41000.0	185.0	-58.3		299.9	571.1	294.5	62.6	1.000067
41100.0	184.1	-58.4		298.7	570.8	294.3	62.4	1.000067
41200.0	183.2	-58.6		297.4	570.6	294.1	62.1	1.000066
41300.0	182.3	-58.8		296.2	570.4	294.0	61.9	1.000066
41400.0	181.4	-58.9		295.0	570.2	293.8	61.7	1.000066
41500.0	180.5	-59.1		293.8	570.0	293.6	61.4	1.000065
41600.0	179.7	-59.3		292.6	569.7	293.4	61.2	1.000065
41700.0	178.8	-59.4		291.5	569.5	293.2	61.0	1.000065
41800.0	177.9	-59.6		290.3	569.3	293.0	60.7	1.000065
41900.0	177.1	-59.8		289.1	569.1	292.8	60.5	1.000064
42000.0	176.2	-59.9		287.9	568.9	292.6	60.3	1.000064
42100.0	175.4	-60.1		286.8	568.6	292.5	60.0	1.000064
42200.0	174.5	-60.3		285.6	568.4	292.3	59.7	1.000064
42300.0	173.7	-60.4		284.4	568.2	292.2	59.4	1.000063
42400.0	172.9	-60.6		283.3	568.0	292.0	59.1	1.000063
42500.0	172.0	-60.7		282.1	567.8	291.8	58.8	1.000063
42600.0	171.2	-60.7		280.7	567.8	291.7	58.4	1.000063
42700.0	170.3	-60.7		279.4	567.8	291.5	58.1	1.000062
42800.0	169.5	-60.7		278.0	567.8	291.4	57.8	1.000062
42900.0	168.7	-60.7		276.7	567.8	291.2	57.5	1.000062
43000.0	167.9	-60.8		275.3	567.8	291.0	57.2	1.000061
43100.0	167.1	-60.8		274.0	567.7	290.9	56.9	1.000061
43200.0	166.2	-60.8		272.7	567.7	290.6	56.5	1.000061
43300.0	165.4	-60.8		271.4	567.7	290.4	56.1	1.000060
43400.0	164.6	-60.8		270.1	567.7	290.2	55.7	1.000060
43500.0	163.8	-60.8		268.8	567.7	290.0	55.3	1.000060
43600.0	163.0	-60.8		267.5	567.7	289.8	54.9	1.000060
43700.0	162.2	-60.8		266.2	567.7	289.6	54.5	1.000059
43800.0	161.4	-60.8		264.9	567.7	289.3	54.1	1.000059

STATION ALTITUDE 34900.00 FEET MSL
15 DEC. 62
ASCENSION NO. 019

UPPER AIR DATA
3490020019
WHITE SANDS
TABLE 20
Cont'd

GEODETIC COORDINATES
32.40045 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TH)	WIND SPEED KNOTS	INDEX OF REFRACTION
43900.0	160.7	-60.9		263.6	567.6	289.1	53.7	1.000059
44000.0	159.9	-60.9		262.4	567.6	288.9	53.3	1.000058
44100.0	159.1	-60.9		261.1	567.6	288.6	52.9	1.000058
44200.0	158.3	-60.9		259.8	567.6	288.4	52.5	1.000058
44300.0	157.6	-60.9		258.6	567.6	288.2	52.1	1.000058
44400.0	156.8	-60.8		257.2	567.7	288.0	51.7	1.000057
44500.0	156.0	-60.4		255.5	568.2	287.7	51.3	1.000057
44600.0	155.3	-60.0		253.8	568.8	287.5	50.9	1.000057
44700.0	154.5	-59.6		252.1	569.3	287.2	50.6	1.000056
44800.0	153.8	-59.5		250.8	569.4	287.0	50.2	1.000056
44900.0	153.0	-59.6		249.6	569.3	286.7	49.8	1.000056
45000.0	152.3	-59.6		248.5	569.3	286.5	49.4	1.000055
45100.0	151.6	-59.7		247.3	569.2	286.2	49.0	1.000055
45200.0	150.8	-59.7		246.2	569.1	286.0	48.6	1.000055
45300.0	150.1	-59.8		245.1	569.0	285.7	48.3	1.000055
45400.0	149.4	-60.0		244.1	568.8	285.6	48.1	1.000054
45500.0	148.6	-60.2		243.2	568.5	285.5	47.9	1.000054
45600.0	147.9	-60.5		242.3	568.2	285.4	47.7	1.000054
45700.0	147.2	-60.7		241.3	567.9	285.3	47.5	1.000054
45800.0	146.5	-60.9		240.4	567.6	285.1	47.4	1.000054
45900.0	145.8	-61.1		239.4	567.3	285.0	47.2	1.000053
46000.0	145.1	-61.0		238.1	567.5	284.9	47.0	1.000053
46100.0	144.4	-60.8		236.9	567.7	284.8	46.8	1.000053
46200.0	143.7	-60.7		235.6	567.8	284.7	46.6	1.000052
46300.0	143.0	-60.6		234.3	568.0	284.5	46.4	1.000052
46400.0	142.3	-60.5		233.0	568.2	284.5	46.2	1.000052
46500.0	141.6	-60.3		231.8	568.3	284.4	45.9	1.000052
46600.0	140.9	-60.2		230.5	568.5	284.4	45.6	1.000051
46700.0	140.2	-60.1		229.2	568.6	284.4	45.3	1.000051
46800.0	139.5	-60.0		228.0	568.8	284.3	45.0	1.000051
46900.0	138.8	-59.8		226.8	569.0	284.3	44.7	1.000051
47000.0	138.2	-59.7		225.5	569.1	284.2	44.4	1.000050
47100.0	137.5	-59.6		224.3	569.3	284.2	44.1	1.000050
47200.0	136.8	-59.6		223.2	569.3	284.2	43.8	1.000050
47300.0	136.2	-59.6		222.2	569.3	284.1	43.5	1.000049
47400.0	135.5	-59.6		221.1	569.3	284.1	43.3	1.000049
47500.0	134.9	-59.7		220.1	569.2	284.1	43.1	1.000049
47600.0	134.2	-59.7		219.0	569.2	284.2	42.9	1.000049
47700.0	133.6	-59.7		218.0	569.2	284.2	42.7	1.000049
47800.0	132.9	-59.7		216.9	569.2	284.2	42.4	1.000048

STATION ALTITUDE 34900.00 FEET MSL
15 DEC. 82 0830 HRS MST
ASCENSION NO. 619

UPPLR AIR DATA
3490020619
WHITE SANDS
TABLE 20

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
47900.0	132.5	-59.7			215.9	569.2	284.3	42.2	1.000048
48000.0	131.6	-59.7			214.8	569.1	284.3	42.0	1.000048
48100.0	131.0	-59.7			213.8	569.1	284.4	41.8	1.000048
48200.0	130.4	-59.7			212.8	569.1	284.4	41.6	1.000047
48300.0	129.7	-59.8			211.8	569.1	284.4	41.4	1.000047
48400.0	129.1	-59.8			210.8	569.1	284.5	41.2	1.000047
48500.0	128.5	-59.8			209.8	569.1	284.5	41.2	1.000047
48600.0	127.9	-59.8			208.8	569.0	284.5	41.2	1.000046
48700.0	127.2	-60.0			207.9	568.8	284.4	41.2	1.000046
48800.0	126.6	-60.1			207.1	568.6	284.4	41.2	1.000046
48900.0	126.0	-60.3			206.2	568.3	284.4	41.2	1.000046
49000.0	125.4	-60.5			205.4	568.1	284.4	41.2	1.000046
49100.0	124.8	-60.7			204.6	567.9	284.3	41.2	1.000046
49200.0	124.2	-60.8			203.7	567.7	284.3	41.2	1.000045
49300.0	123.6	-60.9			202.9	567.5	284.3	41.2	1.000045
49400.0	123.0	-61.0			201.9	567.4	284.3	41.2	1.000045
49500.0	122.4	-61.1			201.0	567.3	284.2	41.2	1.000045
49600.0	121.8	-61.2			200.1	567.2	284.2	41.2	1.000045
49700.0	121.2	-61.2			199.2	567.1	284.1	41.2	1.000044
49800.0	120.6	-61.3			198.3	567.0	284.0	41.2	1.000044
49900.0	120.0	-61.4			197.4	566.9	283.8	41.2	1.000044
50000.0	119.4	-61.4			196.5	566.9	283.7	41.2	1.000044
50100.0	118.8	-61.5			195.6	566.8	283.6	41.1	1.000044
50200.0	118.2	-61.6			194.7	566.7	283.5	41.1	1.000043
50300.0	117.7	-61.7			193.8	566.6	283.4	41.1	1.000043
50400.0	117.1	-61.7			192.9	566.5	283.3	41.1	1.000043
50500.0	116.5	-61.8			192.1	566.4	283.2	41.1	1.000043
50600.0	115.9	-61.9			191.2	566.3	283.1	41.0	1.000043
50700.0	115.4	-61.9			190.3	566.2	282.9	41.0	1.000042
50800.0	114.8	-62.0			189.5	566.1	282.9	40.9	1.000042
50900.0	114.3	-62.1			188.6	566.0	282.8	40.9	1.000042
51000.0	113.7	-62.4			188.0	565.8	282.7	40.8	1.000042
51100.0	113.1	-62.8			187.4	565.8	282.6	40.7	1.000042
51200.0	112.6	-63.3			186.9	564.4	282.5	40.7	1.000042
51300.0	112.0	-63.7			186.3	563.8	282.4	40.6	1.000041
51400.0	111.5	-64.1			185.8	563.2	282.3	40.5	1.000041
51500.0	110.9	-64.6			185.2	562.7	282.2	40.5	1.000041
51600.0	110.4	-65.0			184.7	562.1	282.1	40.4	1.000041
51700.0	109.8	-65.4			184.2	561.5	282.0	40.3	1.000041
51800.0	109.3	-65.9			183.6	560.9	281.9	40.3	1.000041

Cont'd

STATION ALTITUDE 3339.00 FEET MS,
15 DEC. 62 0830 HRS, MST
ASCESSION 140. 019

UPPER AIR DATA
3490020619
WHITE SANDS
Table 20
Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37053 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KIOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KIOTS	INDEX OF REFRACTION
51900.0	108.7	-66.3		183.1	560.3	281.8	40.2	1.000041
52000.0	108.2	-66.7		182.6	559.7	281.7	40.2	1.000041
52100.0	107.6	-67.2		182.0	559.1	281.6	40.1	1.000041
52200.0	107.1	-67.6		181.5	558.6	281.4	40.1	1.000040
52300.0	106.6	-68.0		181.0	558.0	281.3	40.0	1.000040
52400.0	106.0	-68.5		180.5	557.4	281.2	40.0	1.000040
52500.0	105.5	-68.9		180.0	556.8	281.1	39.9	1.000040
52600.0	105.0	-69.3		179.6	557.6	280.9	39.9	1.000039
52700.0	104.5	-69.7		179.2	558.4	280.8	39.8	1.000039
52800.0	103.9	-67.1		175.8	559.2	280.7	39.8	1.000039
52900.0	103.4	-66.5		174.4	560.0	280.6	39.7	1.000039
53000.0	102.9	-65.9		173.0	560.8	280.7	39.9	1.000039
53100.0	102.4	-65.3		171.7	561.6	280.8	40.0	1.000038
53200.0	101.9	-64.7		170.3	562.4	280.9	40.2	1.000038
53300.0	101.4	-64.1		169.0	563.2	281.0	40.3	1.000038
53400.0	100.9	-63.5		167.7	564.0	281.1	40.4	1.000037
53500.0	100.4	-63.0		166.4	564.8	281.2	40.6	1.000037
53600.0	99.9	-62.5		165.2	565.4	281.3	40.7	1.000037
53700.0	99.4	-62.5		164.4	565.4	281.4	40.9	1.000037
53800.0	98.9	-62.5		163.6	565.4	281.5	41.0	1.000036
53900.0	98.4	-62.5		162.8	565.4	281.6	41.1	1.000036
54000.0	97.9	-62.5		162.0	565.4	281.7	41.3	1.000036
54100.0	97.5	-62.5		161.2	565.4	282.1	41.4	1.000036
54200.0	97.0	-62.5		160.4	565.4	282.5	41.4	1.000036
54300.0	96.5	-62.5		159.6	565.4	282.8	41.5	1.000036
54400.0	96.0	-62.5		158.8	565.4	283.2	41.6	1.000035
54500.0	95.6	-62.5		158.0	565.4	283.6	41.7	1.000035
54600.0	95.1	-62.5		157.3	565.4	284.0	41.8	1.000035
54700.0	94.6	-62.4		156.4	565.6	284.3	41.9	1.000035
54800.0	94.2	-62.2		155.5	565.8	284.7	42.0	1.000035
54900.0	93.7	-62.1		154.7	566.0	285.1	42.1	1.000034
55000.0	93.3	-62.0		153.8	566.1	285.4	42.2	1.000034
55100.0	92.8	-61.8		153.0	566.3	285.8	42.3	1.000034
55200.0	92.3	-61.7		152.1	566.5	286.1	42.2	1.000034
55300.0	91.9	-61.6		151.3	566.7	286.3	42.0	1.000034
55400.0	91.4	-61.4		150.5	566.9	286.6	41.8	1.000034
55500.0	91.0	-61.3		149.6	567.0	286.9	41.6	1.000033
55600.0	90.6	-61.2		148.8	567.2	287.2	41.5	1.000033
55700.0	90.1	-61.0		148.0	567.4	287.5	41.3	1.000033
55800.0	89.7	-60.9		147.2	567.6	287.8	41.2	1.000033

STATION ALTITUDE 3909.00 FEET
15 DEC. 62
ASCENSION NO. 019

UPPER AIR DATA
3430020019
WHITE SANDS

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 20
Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX UP REFRACTION
5900.0	89.2	-60.9		140.5	567.0	288.1	41.0	1.000033
5000.0	80.8	-60.9		145.8	567.6	288.4	40.8	1.000032
5010.0	80.4	-60.9		145.1	567.5	288.7	40.7	1.000032
5020.0	87.9	-60.9		144.3	567.5	289.0	40.5	1.000032
5030.0	87.5	-60.9		143.7	567.5	289.2	40.2	1.000032
5040.0	87.1	-60.9		143.0	567.5	289.3	39.6	1.000032
5050.0	86.7	-60.9		142.3	567.5	289.4	39.0	1.000032
5060.0	86.2	-60.9		141.6	567.5	289.5	38.4	1.000032
5070.0	85.8	-60.9		140.9	567.5	289.6	37.9	1.000031
5080.0	85.4	-61.0		140.2	567.5	289.7	37.3	1.000031
5090.0	85.0	-61.0		139.5	567.5	289.8	36.7	1.000031
5700.0	84.6	-61.0		138.9	567.5	289.9	36.1	1.000031
5710.0	84.2	-61.0		138.2	567.5	290.0	35.6	1.000031
5720.0	83.8	-61.0		137.5	567.5	290.2	35.0	1.000031
5730.0	83.3	-61.0		136.8	567.5	290.3	34.4	1.000030
5740.0	82.9	-61.0		136.2	567.5	290.4	33.8	1.000030
5750.0	82.5	-61.0		135.5	567.5	290.7	33.0	1.000030
5760.0	82.1	-61.0		134.9	567.4	290.9	32.2	1.000030
5770.0	81.7	-61.0		134.2	567.4	291.2	31.3	1.000030
5780.0	81.3	-61.0		133.6	567.4	291.4	30.5	1.000030
5790.0	80.9	-61.0		132.9	567.4	291.7	29.7	1.000030
5800.0	80.6	-61.0		132.3	567.4	292.0	28.9	1.000029
5810.0	80.2	-61.0		131.6	567.4	292.3	28.1	1.000029
5820.0	79.8	-61.0		131.0	567.4	292.6	27.3	1.000029
5830.0	79.4	-61.0		130.4	567.4	293.0	26.4	1.000029
5840.0	79.0	-61.0		129.7	567.4	293.4	25.6	1.000029
5850.0	78.6	-61.0		129.1	567.4	293.8	24.8	1.000029
5860.0	78.2	-61.0		128.5	567.4	293.9	24.0	1.000029
5870.0	77.8	-61.0		127.9	567.4	294.0	23.1	1.000028
5880.0	77.5	-61.1		127.2	567.4	294.2	22.2	1.000028
5890.0	77.1	-61.1		126.6	567.4	294.3	21.3	1.000028
5900.0	76.7	-61.1		126.0	567.4	294.4	20.5	1.000028
5910.0	76.3	-61.1		125.4	567.3	294.5	19.6	1.000028
5920.0	76.0	-61.1		124.8	567.3	294.7	18.7	1.000028
5930.0	75.6	-61.1		124.2	567.3	294.8	17.9	1.000028
5940.0	75.2	-61.1		123.6	567.3	295.0	17.0	1.000028
5950.0	74.9	-61.1		123.0	567.3	295.2	16.1	1.000027
5960.0	74.5	-61.1		122.4	567.3	295.4	15.3	1.000027
5970.0	74.1	-61.1		121.8	567.3	295.7	14.4	1.000027
5980.0	73.8	-61.0		121.1	567.5	295.3	13.5	1.000027

STATION ALTITUDE 3939.00 FT. 1.45,
 15 DEC. 62 0830 HRS MST
 ASCENSION NO. 017

UPPER AIR DATA
 3490020019
 WHITE SANDS
 TABLE 20
 Cont'd

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMID. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
39900.0	73.4	-60.8		120.4	567.7	294.2	1.000027
60000.0	73.1	-60.6		119.6	568.0	293.0	1.000027
60100.0	72.7	-60.4		119.1	568.2	291.6	1.000027
60200.0	72.4	-60.3		118.4	568.4	290.0	1.000026
60300.0	72.0	-60.1		117.8	568.6	288.1	1.000026
60400.0	71.7	-59.9		117.1	568.9	285.8	1.000026
60500.0	71.3	-59.8		116.4	569.1	283.1	1.000026
60600.0	71.0	-59.6		115.8	569.3	279.8	1.000026
60700.0	70.6	-59.4		115.1	569.6	275.7	1.000026
60800.0	70.3	-59.2		114.5	569.8	270.6	1.000025
60900.0	69.9	-59.1		113.8	570.0	264.0	1.000025
61000.0	69.6	-59.2		113.3	569.9	255.8	1.000025
61100.0	69.3	-59.2		112.6	569.8	249.7	1.000025
61200.0	68.9	-59.3		112.3	569.7	244.4	1.000025
61300.0	68.6	-59.3		111.8	569.6	239.7	1.000025
61400.0	68.3	-59.4		111.3	569.6	235.6	1.000025
61500.0	67.9	-59.5		110.8	569.5	232.0	1.000025
61600.0	67.6	-59.5		110.3	569.4	228.9	1.000025
61700.0	67.3	-59.6		109.8	569.3	226.2	1.000024
61800.0	67.0	-59.6		109.3	569.2	223.8	1.000024
61900.0	66.6	-59.7		108.8	569.2	221.7	1.000024
62000.0	66.3	-59.8		108.3	569.1	219.8	1.000024
62100.0	66.0	-59.8		107.8	569.0	218.1	1.000024
62200.0	65.7	-59.9		107.3	568.9	216.6	1.000024
62300.0	65.4	-59.9		106.8	568.8	216.2	1.000024
62400.0	65.1	-60.0		106.3	568.8	216.9	1.000024
62500.0	64.7	-59.9		105.7	569.0	217.5	1.000024
62600.0	64.4	-59.7		105.2	569.1	218.1	1.000023
62700.0	64.1	-59.6		104.6	569.3	218.7	1.000023
62800.0	63.8	-59.5		104.0	569.5	219.2	1.000023
62900.0	63.5	-59.4		103.5	569.6	219.6	1.000023
63000.0	63.2	-59.2		102.9	569.8	220.1	1.000023
63100.0	62.9	-59.1		102.4	569.9	220.5	1.000023
63200.0	62.6	-59.0		101.8	570.1	220.9	1.000023
63300.0	62.3	-58.9		101.3	570.3	221.3	1.000023
63400.0	62.0	-58.7		100.7	570.4	221.6	1.000022
63500.0	61.7	-58.6		100.2	570.6	222.0	1.000022
63600.0	61.4	-58.5		99.6	570.8	221.7	1.000022
63700.0	61.1	-58.4		99.1	570.9	221.4	1.000022
63800.0	60.8	-58.3		98.6	571.1	221.1	1.000022

STATION ALTITUDE 3909.00 FEET MSL
15 DEC. 62
ASCENSION NO. 019

UPPER AIR DATA
3490020619
WHITE SANDS
TABLE 20
Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS ANGLE (TN)	INDEX OF REFRACTION
03900.0	60.5	-58.1		98.0	571.5	220.8	1.000022
04000.0	60.2	-58.0		97.5	571.4	220.5	1.000022
04100.0	59.9	-57.9		97.0	571.6	220.2	1.000022
04200.0	59.6	-57.8		96.5	571.8	219.8	1.000021
04300.0	59.4	-57.7		96.0	571.8	219.5	1.000021
04400.0	59.1	-57.7		95.5	571.8	219.1	1.000021
04500.0	58.8	-57.7		95.1	571.8	218.7	1.000021
04600.0	58.5	-57.7		94.6	571.8	218.3	1.000021
04700.0	58.2	-57.7		94.1	571.8	217.9	1.000021
04800.0	57.9	-57.7		93.7	571.8	218.7	1.000021
04900.0	57.7	-57.7		93.2	571.8	219.6	1.000021
05000.0	57.4	-57.7		92.8	571.8	220.6	1.000021
05100.0	57.1	-57.7		92.4	571.8	221.7	1.000021
05200.0	56.8	-57.7		91.9	571.8	222.8	1.000020
05300.0	56.6	-57.7		91.5	571.8	224.1	1.000020
05400.0	56.3	-57.7		91.0	571.8	225.5	1.000020
05500.0	56.0	-57.7		90.6	571.8	227.1	1.000020
05600.0	55.8	-57.7		90.2	571.8	228.8	1.000020
05700.0	55.5	-57.7		89.7	571.8	230.7	1.000020
05800.0	55.2	-57.7		89.3	571.8	232.8	1.000020
05900.0	55.0	-57.7		88.9	571.8	235.2	1.000020
06000.0	54.7	-57.7		88.5	571.8	239.9	1.000020
06100.0	54.4	-57.7		88.0	571.8	244.6	1.000020
06200.0	54.2	-57.7		87.6	571.8	249.1	1.000020
06300.0	53.9	-57.7		87.2	571.8	253.5	1.000019
06400.0	53.7	-57.7		86.8	571.8	257.6	1.000019
06500.0	53.4	-57.7		86.4	571.8	261.5	1.000019
06600.0	53.2	-57.7		85.9	571.8	265.2	1.000019
06700.0	52.9	-57.6		85.5	572.0	268.6	1.000019
06800.0	52.6	-57.4		85.0	572.2	271.7	1.000019
06900.0	52.4	-57.3		84.6	572.4	274.6	1.000019
07000.0	52.1	-57.2		84.1	572.6	277.3	1.000019
07100.0	51.9	-57.0		83.7	572.7	279.7	1.000019
07200.0	51.7	-56.9		83.2	572.9	280.9	1.000019
07300.0	51.4	-56.7		82.7	573.1	282.0	1.000018
07400.0	51.2	-56.6		82.3	573.3	283.2	1.000018
07500.0	50.9	-56.4		81.9	573.5	284.3	1.000018
07600.0	50.7	-56.3		81.4	573.7	285.5	1.000018
07700.0	50.4	-56.2		81.0	573.9	286.7	1.000018
07800.0	50.2	-56.0		80.5	574.1	287.8	1.000018

STATION ALTITUDE 3989.00 FEET MSL
 15 DEC. 62 0830 HRS MST
 ASCLHSJH NO. 019

UPPER AIR DATA
 3490020619
 WHITE SANDS
 TABLE 20
 Cont'd

GEODETIC COORDINATES
 32.40043 LAT UEG
 106.37033 LONG UEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERAT. AIR DEGREES	REL. HUMID. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
67900.0	50.0	-55.9		80.1	574.2	289.0	1.000018
68000.0	49.7	-56.0		79.8	574.1	290.2	1.000018
68100.0	49.5	-56.1		79.4	574.0	291.3	1.000018
68200.0	49.2	-56.2		79.1	573.8	292.5	1.000018
68300.0	49.0	-56.3		78.7	573.7	293.7	1.000018
68400.0	48.8	-56.4		78.4	573.6	294.8	1.000017
68500.0	48.5	-56.4		78.0	573.5	296.1	1.000017
68600.0	48.3	-56.5		77.7	573.4	297.6	1.000017
68700.0	48.1	-56.6		77.4	573.3	299.3	1.000017
68800.0	47.9	-56.7		77.0	573.1	301.2	1.000017
68900.0	47.6	-56.8		76.7	573.0	303.4	1.000017
69000.0	47.4	-56.9		76.4	572.9	306.1	1.000017
69100.0	47.2	-57.0		76.0	572.8	309.2	1.000017
69200.0	46.9	-57.1		75.7	572.7	312.9	1.000017
69300.0	46.7	-57.2		75.4	572.6	317.3	1.000017
69400.0	46.5	-57.2		75.0	572.4	322.7	1.000017
69500.0	46.3	-57.3		74.7	572.3	329.1	1.000017
69600.0	46.1	-57.4		74.4	572.2	336.9	1.000017
69700.0	45.8	-57.4		74.0	572.2	338.9	1.000016
69800.0	45.6	-57.4		73.7	572.2	340.8	1.000016
69900.0	45.4	-57.4		73.3	572.2	342.5	1.000016
70000.0	45.2	-57.4		73.0	572.2	344.2	1.000016
70100.0	45.0	-57.4		72.6	572.2	345.7	1.000016
70200.0	44.8	-57.4		72.3	572.2	347.1	1.000016
70300.0	44.5	-57.4		71.9	572.2	348.5	1.000016
70400.0	44.3	-57.4		71.6	572.2	349.7	1.000016
70500.0	44.1	-57.4		71.2	572.2	350.9	1.000016
70600.0	43.9	-57.4		70.9	572.2	352.0	1.000016
70700.0	43.7	-57.4		70.6	572.2	353.1	1.000016
70800.0	43.5	-57.4		70.2	572.2	354.1	1.000016
70900.0	43.3	-57.4		69.9	572.2	355.1	1.000016
71000.0	43.1	-57.4		69.6	572.2	358.1	1.000015
71100.0	42.9	-57.4		69.2	572.2	1.3	1.000015
71200.0	42.7	-57.4		68.9	572.2	4.8	1.000015
71300.0	42.5	-57.4		68.6	572.2	8.5	1.000015
71400.0	42.3	-57.4		68.2	572.2	12.5	1.000015
71500.0	42.1	-57.4		67.9	572.2	16.7	1.000015
71600.0	41.9	-57.4		67.6	572.2	21.0	1.000015
71700.0	41.7	-57.4		67.3	572.2	25.6	1.000015
71800.0	41.5	-57.4		66.9	572.2	30.2	1.000015

STATION ALTITUDE 3989.00 FEET MSL
 15 DEC. 62
 ASCENSION NO. 619
 UPPER AIR DATA
 3490020019
 WHITE SANDS
 TABLE 20
 Cont'd
 GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DIRECTION (DEGREES)	WIND SPEED KNOTS	INDEX OF REFRACTION
71900.0	41.3	-57.4		60.6	572.2	34.9	3.7	1.000015
72000.0	41.1	-57.4		60.3	572.2	39.6	3.7	1.000015
72100.0	40.9	-57.4		60.0	572.2	44.2	3.8	1.000015
72200.0	40.7	-57.4		65.7	572.2	48.9	3.8	1.000015
72300.0	40.5	-57.4		65.4	572.2	55.3	4.0	1.000015
72400.0	40.3	-57.4		65.0	572.2	61.0	4.3	1.000014
72500.0	40.1	-57.4		64.7	572.2	66.0	4.6	1.000014
72600.0	39.9	-57.4		64.4	572.2	70.5	4.9	1.000014
72700.0	39.7	-57.4		64.1	572.2	74.3	5.2	1.000014
72800.0	39.5	-57.4		63.8	572.2	77.7	5.6	1.000014
72900.0	39.3	-57.4		63.5	572.2	80.7	5.9	1.000014
73000.0	39.1	-57.4		63.2	572.2	83.3	6.3	1.000014
73100.0	39.0	-57.4		62.9	572.2	85.7	6.7	1.000014
73200.0	38.8	-57.4		62.6	572.2	87.7	7.2	1.000014
73300.0	38.6	-57.4		62.3	572.2	89.5	7.6	1.000014
73400.0	38.4	-57.4		62.0	572.2	91.1	8.0	1.000014
73500.0	38.2	-57.4		61.7	572.2	92.4	8.4	1.000014
73600.0	38.0	-57.4		61.4	572.2	92.6	8.6	1.000014
73700.0	37.9	-57.4		61.1	572.2	92.7	8.8	1.000014
73800.0	37.7	-57.4		60.8	572.2	92.9	9.0	1.000014
73900.0	37.5	-57.4		60.5	572.2	93.0	9.2	1.000013
74000.0	37.3	-57.4		60.2	572.2	93.2	9.5	1.000013
74100.0	37.1	-57.4		60.0	572.2	93.3	9.7	1.000013
74200.0	37.0	-57.4		59.7	572.2	93.4	9.9	1.000013
74300.0	36.8	-57.4		59.4	572.2	93.6	10.1	1.000013
74400.0	36.6	-57.4		59.1	572.2	93.7	10.3	1.000013
74500.0	36.4	-57.4		58.8	572.2	93.8	10.5	1.000013
74600.0	36.3	-57.4		58.5	572.2	93.9	10.7	1.000013
74700.0	36.1	-57.4		58.3	572.2	94.0	10.9	1.000013
74800.0	35.9	-57.4		58.0	572.2	94.2	11.2	1.000013
74900.0	35.7	-57.4		57.7	572.2	94.7	11.5	1.000013
75000.0	35.6	-57.4		57.4	572.2	95.2	11.9	1.000013
75100.0	35.4	-57.4		57.2	572.2	95.7	12.2	1.000013
75200.0	35.2	-57.4		56.9	572.2	96.1	12.6	1.000013
75300.0	35.1	-57.4		56.6	572.2	96.5	13.0	1.000013
75400.0	34.9	-57.2		56.3	572.5	96.9	13.3	1.000013
75500.0	34.7	-57.1		56.0	572.6	97.3	13.7	1.000012
75600.0	34.6	-57.0		55.7	572.8	97.7	14.0	1.000012
75700.0	34.4	-56.8		55.4	573.0	98.0	14.4	1.000012
75800.0	34.2	-56.7		55.1	573.2	98.3	14.8	1.000012

UPPER AIR DATA
340020619
WHITE SANDS

STATION ALTITUDE 3409.00 FEET MS,
15 DEC. 82
0030 HRS MST

ASLENSION NO. 619

GEODETIC COORDINATES
32.40043 LAT UEG
106.37033 LON UEG

TABLE 20
Cont'd

GEOMETRIC ALTITUDE MSL FELT	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
75900.0	34.1	-56.6		54.8	573.4	98.6	15.1	1.000012
76000.0	33.9	-56.4		54.5	573.5	98.9	15.5	1.000012
76100.0	33.8	-56.3		54.2	573.7	99.2	15.8	1.000012
76200.0	33.6	-56.1		53.9	573.9	99.2	16.0	1.000012
76300.0	33.4	-56.0		53.6	574.1	99.1	16.0	1.000012
76400.0	33.3	-55.9		53.4	574.2	99.0	16.0	1.000012
76500.0	33.1	-55.7		53.1	574.4	98.9	16.1	1.000012
76600.0	33.0	-55.6		52.8	574.6	98.8	16.1	1.000012
76700.0	32.8	-55.5		52.5	574.8	98.6	16.1	1.000012
76800.0	32.7	-55.3		52.2	575.0	98.5	16.1	1.000012
76900.0	32.5	-55.2		51.9	575.1	98.4	16.2	1.000012
77000.0	32.3	-55.1		51.7	575.3	98.3	16.2	1.000012
77100.0	32.2	-54.9		51.4	575.5	98.1	16.2	1.000011
77200.0	32.0	-54.8		51.1	575.7	98.0	16.2	1.000011
77300.0	31.9	-54.7		50.8	575.9	97.9	16.2	1.000011
77400.0	31.7	-54.5		50.6	576.0	97.8	16.3	1.000011
77500.0	31.6	-54.4		50.3	576.2	97.7	16.3	1.000011
77600.0	31.4	-54.2		50.0	576.4	97.3	16.3	1.000011
77700.0	31.3	-54.1		49.8	576.6	96.9	16.4	1.000011
77800.0	31.1	-54.0		49.5	576.8	96.5	16.4	1.000011
77900.0	31.0	-53.8		49.2	576.9	96.1	16.5	1.000011
78000.0	30.9	-53.7		49.0	577.1	95.7	16.5	1.000011
78100.0	30.7	-53.6		48.7	577.3	95.3	16.6	1.000011
78200.0	30.6	-53.4		48.5	577.5	95.0	16.7	1.000011
78300.0	30.4	-53.3		48.2	577.6	94.6	16.7	1.000011
78400.0	30.3	-53.2		47.9	577.8	94.2	16.8	1.000011
78500.0	30.1	-53.0		47.7	578.0	93.8	16.8	1.000011
78600.0	30.0	-52.9		47.4	578.2	93.5	16.9	1.000011
78700.0	29.8	-52.9		47.2	578.2	93.1	17.0	1.000011
78800.0	29.7	-52.9		47.0	578.2	92.7	17.0	1.000010
78900.0	29.6	-52.9		46.8	578.2	92.6	17.1	1.000010
79000.0	29.4	-52.9		46.5	578.2	92.9	17.2	1.000010
79100.0	29.3	-52.8		46.3	578.2	93.2	17.3	1.000010
79200.0	29.2	-52.8		46.1	578.3	93.5	17.5	1.000010
79300.0	29.0	-52.8		45.9	578.3	93.7	17.6	1.000010
79400.0	28.9	-52.8		45.7	578.3	94.0	17.7	1.000010
79500.0	28.8	-52.8		45.5	578.3	94.3	17.9	1.000010
79600.0	28.6	-52.8		45.2	578.3	94.6	18.0	1.000010
79700.0	28.5	-52.8		45.0	578.3	94.9	18.1	1.000010
79800.0	28.4	-52.8		44.8	578.3	95.1	18.3	1.000010

STATION ALTITUDE 340020619
15 DEC 52 0630 HRS MST
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UPPER AIR DATA
340020619
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.57033 LON DEG

TABLE 20
Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TN)	SPEED KNOTS	INDEX OF REFRACTION
79900.0	20.2	-52.8		44.6	578.4	95.4	18.4	1.000010
80000.0	20.1	-52.7		44.4	578.4	95.6	18.5	1.000010
80100.0	20.0	-52.7		44.2	578.4	95.9	18.7	1.000010
80200.0	27.8	-52.7		44.0	578.4	96.1	18.8	1.000010
80300.0	27.7	-52.7		43.8	578.4	96.7	18.9	1.000010
80400.0	27.6	-52.7		43.6	578.4	97.4	19.1	1.000010
80500.0	27.4	-52.7		43.4	578.4	98.1	19.3	1.000010
80600.0	27.3	-52.7		43.1	578.5	98.9	19.5	1.000010
80700.0	27.2	-52.7		42.9	578.5	99.6	19.6	1.000010
80800.0	27.1	-52.7		42.7	578.5	100.3	19.8	1.000010
80900.0	26.9	-52.6		42.5	578.5	101.0	20.0	1.000009
81000.0	26.8	-52.6		42.3	578.5	101.6	20.2	1.000009
81100.0	26.7	-52.6		42.1	578.5	102.3	20.4	1.000009
81200.0	26.6	-52.6		41.9	578.5	102.9	20.6	1.000009
81300.0	26.4	-52.6		41.7	578.6	103.6	20.8	1.000009
81400.0	26.3	-52.6		41.5	578.6	104.2	21.0	1.000009
81500.0	26.2	-52.6		41.4	578.6	104.8	21.2	1.000009
81600.0	26.1	-52.6		41.2	578.6	105.4	21.4	1.000009
81700.0	25.9	-52.6		41.0	578.6	105.1	21.2	1.000009
81800.0	25.8	-52.5		40.8	578.6	104.4	20.9	1.000009
81900.0	25.7	-52.5		40.6	578.6	103.8	20.6	1.000009
82000.0	25.6	-52.5		40.4	578.7	103.1	20.3	1.000009
82100.0	25.5	-52.5		40.2	578.7	102.3	20.0	1.000009
82200.0	25.3	-52.5		40.0	578.7	101.6	19.7	1.000009
82300.0	25.2	-52.5		39.8	578.7	100.8	19.4	1.000009
82400.0	25.1	-52.5		39.6	578.7	100.0	19.1	1.000009
82500.0	25.0	-52.5		39.4	578.7	99.2	18.8	1.000009
82600.0	24.9	-52.5		39.3	578.8	98.3	18.5	1.000009
82700.0	24.8	-52.4		39.1	578.8	97.5	18.2	1.000009
82800.0	24.6	-52.4		38.9	578.8	96.6	17.9	1.000009
82900.0	24.5	-52.4		38.7	578.8	95.6	17.7	1.000009
83000.0	24.4	-52.4		38.5	578.8	94.7	17.4	1.000009
83100.0	24.3	-52.4		38.3	578.8	94.0	17.3	1.000009
83200.0	24.2	-52.2		38.1	579.1	94.5	17.3	1.000008
83300.0	24.1	-52.0		37.9	579.3	94.5	17.2	1.000008
83400.0	24.0	-51.9		37.7	579.5	94.4	17.2	1.000008
83500.0	23.9	-51.7		37.5	579.6	94.4	17.2	1.000008
83600.0	23.7	-51.5		37.3	580.0	94.3	17.1	1.000008
83700.0	23.6	-51.3		37.1	580.2	94.3	17.1	1.000008
83800.0	23.5	-51.1		36.9	580.5	94.2	17.0	1.000008

STATION: ALTITUDE 3939.00 FEET MSL
15 ULC. 02
ASCENSION NO. 019

UPPER AIR DATA
3490020619
WHITE SANDS

GEODETIC COORDINATES
32-40043 LAT DEG
106-37033 LONG DEG

TABLE 20
Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
03900.0	23.4	-51.0		36.7	580.7	94.2	1.000008
04000.0	23.3	-50.8		36.5	580.9	94.1	1.000008
04100.0	23.2	-50.6		36.3	581.2	94.1	1.000008
04200.0	23.1	-50.4		36.1	581.4	94.0	1.000008
04300.0	23.0	-50.2		35.9	581.7	93.9	1.000008
04400.0	22.9	-50.1		35.7	581.9	93.9	1.000008
04500.0	22.8	-49.9		35.5	582.1	93.8	1.000008
04600.0	22.7	-49.7		35.4	582.4	93.8	1.000008
04700.0	22.6	-49.5		35.2	582.6	94.2	1.000008
04800.0	22.5	-49.3		35.0	582.8	94.6	1.000008
04900.0	22.4	-49.2		34.8	583.1	95.0	1.000008
05000.0	22.3	-49.0		34.6	583.3	95.5	1.000008
05100.0	22.2	-48.8		34.4	583.5	95.9	1.000008
05200.0	22.1	-48.6		34.2	583.8	96.4	1.000008
05300.0	22.0	-48.4		34.0	584.0	96.9	1.000008
05400.0	21.9	-48.3		33.9	584.2	97.4	1.000008
05500.0	21.8	-48.1		33.7	584.5	97.9	1.000007
05600.0	21.7	-47.9		33.5	584.7	98.4	1.000007
05700.0	21.6	-47.7		33.3	584.9	99.0	1.000007
05800.0	21.5	-47.5		33.1	585.1	99.0	1.000007
05900.0	21.4	-47.4		33.0	585.4	100.1	1.000007
06000.0	21.3	-47.2		32.8	585.6	100.7	1.000007
06100.0	21.2	-47.0		32.6	585.8	101.4	1.000007
06200.0	21.1	-46.8		32.4	586.1	102.0	1.000007
06300.0	21.0	-46.7		32.3	586.3	102.8	1.000007
06400.0	20.9	-46.5		32.1	586.5	103.5	1.000007
06500.0	20.8	-46.3		31.9	586.8	104.4	1.000007
06600.0	20.7	-46.1		31.7	587.0	105.3	1.000007
06700.0	20.6	-45.9		31.6	587.2	106.3	1.000007
06800.0	20.5	-45.8		31.4	587.5	107.4	1.000007
06900.0	20.4	-45.6		31.2	587.7	108.5	1.000007
07000.0	20.3	-45.4		31.1	587.9	109.8	1.000007
07100.0	20.2	-45.2		30.9	588.2	111.2	1.000007
07200.0	20.1	-45.0		30.7	588.4	112.7	1.000007
07300.0	20.0	-44.9		30.6	588.6	114.3	1.000007
07400.0	19.9	-44.8		30.4	588.7	116.1	1.000007
07500.0	19.8	-44.8		30.3	588.7	118.1	1.000007
07600.0	19.8	-44.7		30.1	588.8	120.3	1.000007
07700.0	19.7	-44.7		30.0	588.8	122.7	1.000007
07800.0	19.6	-44.7		29.9	588.8	125.4	1.000007

STATION ALTITUDE 3989.00 FEET MSL
15 DEC. 62 0830 HRS MST
ASCENSION NO. 019

UPPER AIR DATA
3490020619
WHITE SANDS

GEODETIC COORDINATES
32-40043 LAT DEG
106-37033 LONG DEG

TABLE 20

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	CONT'D DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
07900.0	19.5	-44.7		29.7	588.8	123.1	6.6	1.000007
08000.0	19.4	-44.7		29.6	588.9	120.4	6.7	1.000007
08100.0	19.3	-44.6		29.5	588.9	117.7	6.7	1.000007
08200.0	19.2	-44.6		29.3	588.9	115.1	6.8	1.000007
08300.0	19.1	-44.6		29.2	589.0	112.5	6.9	1.000006
08400.0	19.1	-44.6		29.0	589.0	110.1	7.0	1.000006
08500.0	19.0	-44.6		28.9	589.0	107.7	7.1	1.000006
08600.0	18.9	-44.5		28.8	589.0	105.3	7.2	1.000006
08700.0	18.8	-44.5		28.7	589.1	103.1	7.4	1.000006
08800.0	18.7	-44.5		28.5	589.1	101.0	7.5	1.000006
08900.0	18.6	-44.5		28.4	589.0	98.9	7.7	1.000006
09000.0	18.5	-44.6		28.3	589.0	96.9	7.9	1.000006
09100.0	18.5	-44.7		28.2	588.9	95.0	8.1	1.000006
09200.0	18.4	-44.7		28.0	588.8	93.2	8.2	1.000006
09300.0	18.3	-44.8		27.9	588.7	91.5	8.4	1.000006
09400.0	18.2	-44.8		27.8	588.6	89.9	8.6	1.000006
09500.0	18.1	-44.9		27.7	588.6	88.2	8.7	1.000006
09600.0	18.1	-45.0		27.6	588.5	86.4	8.7	1.000006
09700.0	18.0	-45.0		27.4	588.4	84.6	8.7	1.000006
09800.0	17.9	-45.1		27.3	588.3	82.8	8.7	1.000006
09900.0	17.8	-45.1		27.2	588.3	81.1	8.7	1.000006
90000.0	17.7	-45.2		27.1	588.2	79.3	8.8	1.000006
90100.0	17.6	-45.3		27.0	588.1	77.6	8.8	1.000006
90200.0	17.6	-45.3		26.9	588.0	75.8	8.9	1.000006
90300.0	17.5	-45.4		26.7	587.9	74.2	8.9	1.000006
90400.0	17.4	-45.4		26.6	587.9	72.5	9.0	1.000006
90500.0	17.3	-45.5		26.5	587.8	70.8	9.1	1.000006
90600.0	17.2	-45.6		26.4	587.7	69.2	9.1	1.000006
90700.0	17.2	-45.6		26.3	587.6	67.6	9.2	1.000006
90800.0	17.1	-45.7		26.2	587.6	66.0	9.3	1.000006
90900.0	17.0	-45.7		26.1	587.5	64.5	9.4	1.000006
91000.0	16.9	-45.8		26.0	587.4	63.0	9.5	1.000006
91100.0	16.9	-45.9		25.8	587.3	62.2	9.7	1.000006
91200.0	16.8	-45.9		25.7	587.2	62.0	9.9	1.000006
91300.0	16.7	-46.0		25.6	587.2	61.8	10.1	1.000006
91400.0	16.6	-46.0		25.5	587.1	61.8	10.3	1.000006
91500.0	16.6	-46.1		25.4	587.0	61.5	10.6	1.000006
91600.0	16.5	-46.2		25.3	586.9	61.3	10.8	1.000006
91700.0	16.4	-46.2		25.2	586.9	61.1	11.0	1.000006
91800.0	16.3	-46.3		25.1	586.8	61.0	11.2	1.000006

STATION ALTITUDE 3989.0 FT MSL
 15 DEC. 62 0830 HRS MST
 ASCENSION NO. 019
 UPPER AIR DATA
 3490020619
 WHITE SANDS
 TABLE 20
 Cont'd
 GEODETIC COORDINATES
 32.40043 LAT UEG
 106.37033 LONG UEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
91900.0	16.3	-46.3		25.0	586.7	60.9	1.000006
92000.0	16.2	-46.4		24.9	586.6	60.7	1.000006
92100.0	16.1	-46.5		24.8	586.6	60.6	1.000006
92200.0	16.0	-46.5		24.7	586.5	60.5	1.000005
92300.0	15.9	-46.6		24.6	586.4	60.3	1.000005
92400.0	15.8	-46.6		24.4	586.3	60.2	1.000005
92500.0	15.8	-46.7		24.3	586.2	60.1	1.000005
92600.0	15.7	-46.8		24.2	586.2	60.0	1.000005
92700.0	15.6	-46.8		24.1	586.1	60.4	1.000005
92800.0	15.6	-46.9		24.0	586.0	62.1	1.000005
92900.0	15.5	-46.9		23.9	585.9	64.2	1.000005
93000.0	15.5	-47.0		23.8	585.9	66.7	1.000005
93100.0	15.4	-47.1		23.7	585.8	70.0	1.000005
93200.0	15.3	-47.1		23.6	585.7	74.1	1.000005
93300.0	15.3	-47.2		23.5	585.6	79.5	1.000005
93400.0	15.2	-47.2		23.4	585.5	86.7	1.000005
93500.0	15.1	-47.3		23.3	585.5	96.6	1.000005
93600.0	15.1	-47.4		23.2	585.4	109.8	1.000005
93700.0	15.0	-47.4		23.1	585.3	126.2	1.000005
93800.0	14.9	-47.5		23.0	585.2	143.8	1.000005
93900.0	14.9	-47.4		22.9	585.3	159.6	1.000005
94000.0	14.8	-47.3		22.8	585.5	172.0	1.000005
94100.0	14.7	-47.2		22.7	585.6	181.3	1.000005
94200.0	14.7	-47.0		22.6	585.8	188.1	1.000005
94300.0	14.6	-46.9		22.5	586.0	192.9	1.000005
94400.0	14.5	-46.8		22.3	586.1	194.4	1.000005
94500.0	14.5	-46.7		22.2	586.3	195.7	1.000005
94600.0	14.4	-46.6		22.1	586.4	196.9	1.000005
94700.0	14.3	-46.4		22.0	586.6	198.0	1.000005
94800.0	14.3	-46.3		21.9	586.8	198.9	1.000005
94900.0	14.2	-46.2		21.8	586.9	199.8	1.000005
95000.0	14.1	-46.1		21.7	587.1	200.6	1.000005
95100.0	14.1	-45.9		21.6	587.2	201.3	1.000005
95200.0	14.0	-45.8		21.5	587.4	202.0	1.000005
95300.0	13.9	-45.7		21.4	587.5	202.6	1.000005
95400.0	13.9	-45.6		21.2	587.7	203.1	1.000005
95500.0	13.8	-45.5		21.1	587.9	203.6	1.000005
95600.0	13.8	-45.3		21.0	588.0	204.1	1.000005
95700.0	13.7	-45.2		20.9	588.2	204.6	1.000005
95800.0	13.6	-45.1		20.8	588.3	205.0	1.000005

STATION ALTITUDE 34900.00 FEET MSL
15 DEC. 62 0830 HRS MST
ASCENSION NO. 619

UPPER AIR DATA
3490020619
WHITE SANDS
TABLE 20
Cont'd

GEOMETRIC ALTITUDE
MSL FEET

PRESSURE
MILLIBARS

TEMPERATURE
AIR DEWPOINT
DEGREES CENTIGRADE

REL HUMIDITY
PERCENT

DENSITY
GM/CUBIC
METER

SPEED OF
SOUND
KNOTS

WIND DATA
DIRECTION
DEGREES (TN)

SPEED
KNOTS

INDEX
OF
REFRACTION

GEODETIC COORDINATES
32.40043 LAT UEG
106.37033 LON UEG

95900.0	13.6	-45.0	20.7	588.5	205.4	15.5	1.000005
96000.0	13.5	-44.8	20.8	588.6	207.6	15.3	1.000005
96100.0	13.5	-44.7	20.5	588.8	210.4	14.9	1.000005
96200.0	13.4	-44.6	20.4	589.0	213.3	14.5	1.000005
96300.0	13.3	-44.5	20.3	589.1	216.4	14.2	1.000005
96400.0	13.3	-44.4	20.2	589.3	219.7	13.9	1.000005
96500.0	13.2	-44.2	20.1	589.4	223.0	13.7	1.000004
96600.0	13.2	-44.1	20.0	589.6	226.5	13.5	1.000004
96700.0	13.1	-44.0	19.9	589.7	230.0	13.4	1.000004
96800.0	13.0	-43.9	19.8	589.9	233.6	13.3	1.000004
96900.0	13.0	-43.7	19.7	590.1	237.3	13.3	1.000004
97000.0	12.9	-43.6	19.6	590.2	240.9	13.3	1.000004
97100.0	12.8	-43.5	19.5	590.4	244.5	13.4	1.000004
97200.0	12.8	-43.4	19.4	590.5	248.0	13.5	1.000004
97300.0	12.7	-43.3	19.3	590.7	251.5	13.7	1.000004
97400.0	12.7	-43.1	19.2	590.8	254.8	14.0	1.000004
97500.0	12.6	-43.0	19.1	591.0	258.0	14.2	1.000004
97600.0	12.6	-42.9	19.0	591.2	260.5	14.9	1.000004
97700.0	12.5	-42.8	18.9	591.3	262.2	15.9	1.000004
97800.0	12.5	-42.6	18.8	591.5	263.6	16.9	1.000004
97900.0	12.4	-42.5	18.7	591.6	264.8	17.9	1.000004
98000.0	12.3	-42.4	18.6	591.8	266.0	18.9	1.000004
98100.0	12.3	-42.3	18.6	591.9	267.0	19.9	1.000004
98200.0	12.2	-42.2	18.5	592.1	267.9	21.0	1.000004
98300.0	12.2	-42.0	18.4	592.3	268.7	22.0	1.000004
98400.0	12.1	-41.9	18.3	592.4	269.5	23.0	1.000004
98500.0	12.1	-41.8	18.2	592.6	270.2	24.1	1.000004
98600.0	12.0	-41.7	18.1	592.7	270.8	25.1	1.000004
98700.0	12.0	-41.5	18.0	592.9	271.4	26.2	1.000004
98800.0	11.9	-41.4	17.9	593.0	271.9	27.3	1.000004
98900.0	11.9	-41.3	17.8	593.2	272.4	28.3	1.000004
99000.0	11.8	-41.2	17.7	593.4	272.9	29.4	1.000004
99100.0	11.8	-41.1	17.6	593.5	273.3	30.4	1.000004
99200.0	11.7	-40.9	17.6	593.7	273.7	31.5	1.000004
99300.0	11.6	-40.8	17.5	593.8	274.1	32.6	1.000004
99400.0	11.6	-40.7	17.4	594.0	274.4	33.6	1.000004
99500.0	11.5	-40.7	17.3	593.9	275.1	33.8	1.000004
99600.0	11.5	-40.8	17.2	593.9	275.9	33.9	1.000004
99700.0	11.4	-40.8	17.2	593.8	276.6	33.9	1.000004
99800.0	11.4	-40.8	17.1	593.8	277.3	34.0	1.000004

STATION ALTITUDE 34900.00 FEET MSL
 15 DEC. 82
 ASCENSION NO. 019

UPPER AIR DATA
 34900.0019
 WHITE SANDS
 TABLE 20
 Cont'd

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES(TN))	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
99900.0	11.3	-40.9		17.0	593.8	278.1	34.1	1.000004
100000.0	11.3	-40.9		16.9	593.7	278.8	34.2	1.000004
100100.0	11.2	-40.9		16.9	593.7	279.5	34.3	1.000004
100200.0	11.2	-40.9		16.8	593.7	280.2	34.4	1.000004
100300.0	11.1	-41.0		16.7	593.6	280.9	34.5	1.000004
100400.0	11.1	-41.0		16.6	593.6	281.6	34.6	1.000004
100500.0	11.0	-41.0		16.6	593.5	282.3	34.7	1.000004
100600.0	11.0	-41.1		16.5	593.5	283.0	34.9	1.000004
100700.0	10.9	-41.1		16.4	593.5	283.7	35.0	1.000004
100800.0	10.9	-41.1		16.4	593.4	284.4	35.1	1.000004
100900.0	10.8	-41.2		16.3	593.4	285.1	35.3	1.000004
101000.0	10.8	-41.2		16.2	593.3	285.8	35.4	1.000004
101100.0	10.8	-41.2		16.1	593.3	286.5	35.6	1.000004
101200.0	10.7	-41.2		16.1	593.3	287.1	35.7	1.000004
101300.0	10.7	-41.3		16.0	593.2	287.7	35.8	1.000004
101400.0	10.6	-41.3		15.9	593.2	287.5	35.6	1.000004
101500.0	10.6	-41.3		15.9	593.2	287.4	35.4	1.000004
101600.0	10.5	-41.4		15.8	593.1	287.3	35.2	1.000004
101700.0	10.5	-41.4		15.7	593.1	287.1	34.9	1.000004
101800.0	10.4	-41.4		15.7	593.0	287.0	34.7	1.000003
101900.0	10.4	-41.5		15.6	593.0	286.8	34.5	1.000003
102000.0	10.3	-41.5		15.5	592.0	286.7	34.3	1.000003
102100.0	10.3	-41.5		15.5	592.9	286.5	34.0	1.000003
102200.0	10.2	-41.5		15.4	592.9	286.4	33.8	1.000003
102300.0	10.2	-41.6		15.3	592.9	286.2	33.6	1.000003
102400.0	10.1	-41.6		15.3	592.8	286.1	33.4	1.000003
102500.0	10.1	-41.6		15.2	592.8	285.9	33.2	1.000003
102600.0	10.1	-41.7		15.1	592.7	285.8	32.9	1.000003
102700.0	10.0	-41.7		15.1	592.7	285.6	32.7	1.000003
102800.0	10.0	-41.7		15.0	592.7	285.4	32.5	1.000003
102900.0	9.9	-41.8		14.9	592.6	285.3	32.3	1.000003
103000.0	9.9	-41.8		14.9	592.6	285.1	32.1	1.000003
103100.0	9.8	-41.8		14.8	592.5	284.9	31.8	1.000003
103200.0	9.8	-41.8		14.8	592.5	284.4	31.7	1.000003
103300.0	9.8	-41.9		14.7	592.5	283.3	31.7	1.000003
103400.0	9.7	-41.9		14.6	592.4	282.1	31.8	1.000003
103500.0	9.7	-41.9		14.6	592.4	281.0	31.8	1.000003
103600.0	9.6	-42.0		14.5	592.3	279.8	31.9	1.000003
103700.0	9.6	-42.0		14.4	592.3	278.7	32.0	1.000003
103800.0	9.5	-42.0		14.4	592.3	277.6	32.0	1.000003

STATION ALTITUDE 39,900 FEET MSL
15 DEC. 62
ASCLN: 106.37033

UPPER AIR DATA
3490020619
WHITE SAWS

GEOMETRIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 20
Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPLF OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
103900.0	9.5	-42.1		14.3	592.2	276.4	32.1	1.000003
104000.0	9.4	-42.1		14.2	592.2	275.3	32.3	1.000003
104100.0	9.4	-42.1		14.2	592.1	274.2	32.4	1.000003
104200.0	9.4	-42.2		14.1	592.1	273.1	32.5	1.000003
104300.0	9.3	-42.2		14.1	592.1	272.0	32.7	1.000003
104400.0	9.3	-42.2		14.0	592.0	270.9	32.8	1.000003
104500.0	9.2	-42.2		13.9	592.0	269.9	33.0	1.000003
104600.0	9.2	-42.3		13.9	591.9	268.8	33.2	1.000003
104700.0	9.2	-42.3		13.8	591.9	267.8	33.4	1.000003
104800.0	9.1	-42.3		13.8	591.9	266.7	33.6	1.000003
104900.0	9.1	-42.4		13.7	591.8	265.7	33.8	1.000003
105000.0	9.0	-42.4		13.6	591.8	264.7	34.0	1.000003
105100.0	9.0	-42.4		13.6	591.8			1.000003
105200.0	9.0	-42.5		13.5	591.7			1.000003
105300.0	8.9	-42.5		13.5	591.7			1.000003
105400.0	8.9	-42.5		13.4	591.6			1.000003
105500.0	8.8	-42.6		13.4	591.6			1.000003
105600.0	8.8	-42.6		13.3	591.6			1.000003
105700.0	8.8	-42.6		13.2	591.5			1.000003
105800.0	8.7	-42.6		13.2	591.5			1.000003
105900.0	8.7	-42.7		13.1	591.4			1.000003
106000.0	8.6	-42.7		13.1	591.4			1.000003
106100.0	8.6	-42.7		13.0	591.4			1.000003
106200.0	8.6	-42.8		13.0	591.3			1.000003
106300.0	8.5	-42.8		12.9	591.3			1.000003
106400.0	8.5	-42.8		12.8	591.2			1.000003
106500.0	8.5	-42.9		12.8	591.2			1.000003
106600.0	8.4	-42.9		12.7	591.2			1.000003
106700.0	8.4	-42.9		12.7	591.1			1.000003
106800.0	8.3	-43.0		12.6	591.1			1.000003
106900.0	8.3	-43.0		12.6	591.0			1.000003
107000.0	8.3	-43.0		12.5	591.0			1.000003
107100.0	8.2	-43.0		12.5	591.0			1.000003
107200.0	8.2	-43.1		12.4	590.9			1.000003
107300.0	8.2	-43.1		12.3	590.9			1.000003
107400.0	8.1	-43.1		12.3	590.8			1.000003
107500.0	8.1	-43.2		12.2	590.8			1.000003
107600.0	8.0	-43.2		12.2	590.8			1.000003
107700.0	8.0	-43.2		12.1	590.7			1.000003
107800.0	8.0	-43.3		12.1	590.7			1.000003

STATION ALTITUDE 5900.00 FEET	UPPER AIR DATA	GEODETIC COORDINATES
15 DEC. 82	3400020019	32.40043 LAT DEG
ASCESSION NO. 019	WHITE SANDS	106.37033 LON DEG
	TABLE 20	
	Cont'd	

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	"IND DATA" "INCLINATION" DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
107900.0	7.9	-43.3		12.0	590.6			1.000003
108000.0	7.9	-43.3		12.0	590.6			1.000003
108100.0	7.9	-43.4		11.9	590.6			1.000003
108200.0	7.8	-43.4		11.9	590.5			1.000003
108300.0	7.8	-43.4		11.8	590.5			1.000003
108400.0	7.8	-43.4		11.8	590.4			1.000003
108500.0	7.7	-43.5		11.7	590.4			1.000003

STATION ALTITUDE 3989.00 FEET SL
15 DEC. 62
ASCENSION NO. 019 0830 HRS MST

MANDATORY LEVELS
3490020619
WHITE SANDS
TABLE 21

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5123.	4.5	-14.3	24.	43.6
800.0	6740.	3.0	-19.3	17.	290.3
750.0	8447.	1.2	-21.1	17.	291.7
700.0	10260.	-1.5	-24.0	16.	300.7
650.0	12188.	-3.4	-25.3	16.	315.1
600.0	14256.	-6.2	-24.5	22.	309.0
550.0	16472.	-10.4	-27.7	22.	301.9
500.0	18858.	-15.3	-33.1	20.	310.8
450.0	21444.	-20.1	-37.0	19.	323.2
400.0	24265.	-27.8	-44.7	18.	323.8
350.0	27364.	-35.8	-51.8	17.	323.0
300.0	30810.	-44.8			320.2
250.0	34714.	-55.6			319.7
200.0	39289.	-60.5			290.5
175.0	42041.	-60.2			292.4
150.0	45192.	-59.8			285.7
125.0	48925.	-60.6			284.4
100.0	53412.	-62.5			281.3
80.0	57951.	-61.0			292.3
70.0	60678.	-59.1			267.2
60.0	63846.	-57.9			13.1
50.0	67626.	-55.9			280.4
40.0	72259.	-57.4			86.5
30.0	78257.	-52.9			93.7
25.0	82120.	-52.5			99.7
20.0	86925.	-44.8			114.1
15.0	93214.	-47.4			114.8
10.0	102178.	-41.7			285.6
					32.8

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 405.00 FEET MSL
15 DEC. 82
ASCENSION NO. 206

SIGNIFICANT LEVEL DATA

34900J0206

JALLEN

TABLE 22

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

PRESSURE (GEOMETRIC ALTITUDE)	TEMPERATURE (AIR DEWPOINT)	REL. HUM. PERCENT
MILLIBARS MSL FEET	DEGREES CENTIGRADE	
885.3 4051.0	-0.1	64.0
883.4 4107.4	-0.7	62.0
877.6 4281.2	2.1	50.0
873.8 4396.6	3.7	43.0
850.0 5132.1	3.1	34.0
810.8 6383.8	1.2	31.0
791.8 7010.7	1.7	17.0
700.0 10254.3	-1.2	20.0
629.9 12999.9	-4.7	20.0
608.3 13900.4	-5.8	32.0
500.0 18851.4	-16.3	29.0
473.3 20203.5	-18.6	27.0
458.7 20971.1	-19.2	17.0
400.0 24262.6	-28.2	22.0
341.7 27906.1	-38.2	25.0
300.0 30807.3	-45.7	
250.0 34711.8	-56.5	
241.6 35424.9	-57.2	
201.2 39163.4	-65.6	
200.0 39283.3	-65.1	
184.0 40979.7	-59.6	
160.2 43827.7	-60.7	
153.6 44693.3	-59.4	
150.0 45181.3	-60.7	
135.9 47215.6	-58.8	
116.4 50412.0	-60.2	
112.4 51132.1	-59.8	
104.8 52576.6	-59.4	
100.0 53545.2	-59.3	
72.4 60168.4	-62.7	
70.0 60859.2	-59.8	
62.7 63140.2	-58.2	
61.6 63509.6	-56.6	
50.0 67857.5	-58.9	
45.9 69640.6	-56.7	
30.0 74608.9	-54.0	
23.5 83853.3	-49.0	

STATION ALTITUDE 6051.00 FEET MSL
15 DEC. 62 0835 HRS MST
ASCENSION NO. 406

UNPLR AIR DATA
3490030200
JALLEN
TABLE 23

GEODETIC COORDINATES
33.16712 LAT DEG
106.49911 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	805.0	-1	64.0	1127.6	644.3	0	0	1.000271
4500.0	870.4	3.6	41.7	1094.0	648.6	236.0	.4	1.000260
5000.0	854.2	3.2	35.6	1075.5	648.0	236.0	.9	1.000253
5500.0	836.3	2.5	33.1	1058.1	647.2	236.0	1.4	1.000248
6000.0	822.6	1.8	31.9	1041.3	646.3	247.8	2.4	1.000243
6500.0	807.2	1.3	28.4	1023.8	645.7	259.0	4.1	1.000238
7000.0	792.1	1.7	17.2	1003.5	646.0	277.7	5.4	1.000229
7500.0	777.2	1.3	17.5	986.1	645.5	296.8	7.0	1.000226
8000.0	762.0	.8	17.9	969.1	645.0	303.4	8.3	1.000222
8500.0	746.2	.4	18.4	952.4	644.5	307.0	9.4	1.000218
9000.0	734.2	-1	18.8	936.0	644.0	301.2	10.0	1.000214
9500.0	720.3	-1.5	19.3	919.9	643.4	298.8	10.9	1.000211
10000.0	705.8	-1.0	19.8	904.1	642.9	302.9	12.4	1.000207
10500.0	693.4	-1.5	20.0	888.8	642.3	305.4	14.2	1.000204
11000.0	680.2	-2.2	20.0	873.9	641.5	306.8	16.3	1.000200
11500.0	667.3	-2.8	20.0	859.3	640.8	306.4	18.6	1.000197
12000.0	654.6	-3.4	20.0	845.0	640.0	305.8	20.9	1.000193
12500.0	642.1	-4.1	20.0	830.9	639.2	303.7	22.8	1.000190
13000.0	629.9	-4.7	20.0	817.0	638.5	302.4	24.5	1.000187
13500.0	617.8	-5.3	26.7	803.0	637.8	303.7	25.3	1.000185
14000.0	605.9	-6.0	31.9	789.5	637.0	305.0	26.2	1.000182
14500.0	594.0	-7.1	31.6	777.2	635.7	306.3	27.2	1.000179
15000.0	582.4	-8.1	31.3	765.0	634.4	304.6	28.4	1.000176
15500.0	571.6	-9.2	31.0	753.1	633.1	302.5	29.7	1.000173
16000.0	559.8	-10.3	30.7	741.3	631.8	300.4	31.3	1.000170
16500.0	548.6	-11.3	30.4	729.8	630.6	298.5	32.9	1.000167
17000.0	538.0	-12.4	30.1	718.4	629.3	297.0	34.2	1.000164
17500.0	527.5	-13.4	29.8	707.2	628.0	296.0	35.5	1.000161
18000.0	517.1	-14.5	29.5	696.2	626.7	295.4	36.9	1.000158
18500.0	507.6	-15.6	29.2	685.4	625.4	294.9	39.4	1.000156
19000.0	497.0	-16.6	28.8	674.5	624.2	302.4	42.1	1.000153
19500.0	487.0	-17.4	28.0	663.2	623.1	304.4	42.5	1.000150
20000.0	477.2	-18.3	27.3	652.0	622.1	305.0	42.5	1.000148
20500.0	467.6	-18.8	23.1	640.4	621.4	304.6	40.7	1.000144
21000.0	458.1	-19.3	17.0	628.6	620.8	304.7	39.4	1.000141
21500.0	448.7	-20.6	17.8	619.0	619.1	305.9	38.5	1.000139
22000.0	439.5	-22.0	18.6	609.5	617.4	307.7	39.0	1.000137
22500.0	430.4	-23.4	19.3	600.3	615.7	309.5	41.2	1.000135
23000.0	421.6	-24.7	20.1	591.1	614.1	311.2	43.5	1.000133
23500.0	412.9	-26.1	20.8	582.2	612.4	311.9	44.8	1.000131

STATION ALTITUDE 405.00 FEET MSL
15 DEC. 62 0835 HRS MST
ASCENSION I.O. 206

UPPER AIR DATA
3490030206
JALLEN
TABLE 23
Cont'd

GEOMETRIC ALTITUDE 405.00 FEET MSL
15 DEC. 62 0835 HRS MST
ASCENSION I.O. 206

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
24000.0	404.4	-27.5	-42.7	21.6	573.4	610.7	311.6	1.000129
24500.0	395.9	-28.9	-43.7	22.2	564.5	608.9	311.2	1.000127
25000.0	387.4	-30.2	-44.7	22.6	555.6	607.2	310.8	1.000124
25500.0	379.2	-31.6	-45.7	23.0	546.8	605.5	311.0	1.000122
26000.0	371.1	-33.0	-46.8	23.4	538.1	603.8	311.1	1.000120
26500.0	363.1	-34.3	-47.8	23.8	529.7	602.1	309.8	1.000118
27000.0	355.4	-35.7	-48.8	24.3	521.3	600.3	308.5	1.000117
27500.0	347.8	-37.1	-49.9	24.7	513.2	598.6	307.2	1.000115
28000.0	340.3	-38.4	-51.3	24.2**	505.0	596.9	306.6	1.000113
28500.0	332.7	-39.7	-54.0	19.9**	496.5	595.2	306.7	1.000111
29000.0	325.5	-41.0	-57.1	15.6**	488.2	593.6	308.1	1.000109
29500.0	318.1	-42.3	-60.7	11.3**	480.1	591.9	310.2	1.000107
30000.0	311.1	-43.6	-65.3	7.0**	472.1	590.2	312.2	1.000105
30500.0	304.2	-44.9	-72.9	2.6**	464.2	588.6	314.1	1.000103
31000.0	297.3	-46.2			456.4	586.9	314.4	1.000102
31500.0	290.5	-47.6			448.6	585.1	314.5	1.000100
32000.0	283.7	-49.0			441.0	583.3	314.2	1.000098
32500.0	277.2	-50.4			433.5	581.5	313.9	1.000097
33000.0	270.8	-51.8			426.1	579.7	313.8	1.000095
33500.0	264.6	-53.1			418.9	577.8	313.7	1.000093
34000.0	258.4	-54.5			411.8	576.0	314.3	1.000092
34500.0	252.5	-55.9			404.9	574.2	314.8	1.000090
35000.0	246.6	-56.8			397.0	573.0	314.2	1.000088
35500.0	240.7	-57.4			388.6	572.3	313.4	1.000087
36000.0	234.9	-58.5			381.2	570.8	309.8	1.000085
36500.0	229.2	-59.6			373.9	569.3	305.9	1.000083
37000.0	223.7	-60.7			366.8	567.8	302.1	1.000082
37500.0	218.3	-61.9			359.9	566.3	298.3	1.000080
38000.0	213.0	-63.0			353.0	564.8	296.5	1.000079
38500.0	207.8	-64.1			346.4	563.3	294.9	1.000077
39000.0	202.8	-65.2			339.8	561.7	295.2	1.000076
39500.0	197.0	-66.4			330.2	562.9	295.6	1.000074
40000.0	193.1	-67.8			319.7	565.1	295.9	1.000071
40500.0	188.4	-69.1			309.0	567.2	296.3	1.000069
41000.0	183.8	-70.6			299.9	569.3	296.1	1.000067
41500.0	179.4	-72.1			292.9	569.0	295.5	1.000065
42000.0	175.1	-73.6			286.2	568.8	294.9	1.000064
42500.0	170.9	-75.1			279.5	568.5	294.1	1.000062
43000.0	166.8	-76.6			273.1	568.3	293.3	1.000061
43500.0	162.8	-78.1			266.7	568.0	292.3	1.000059

** AT LALT USE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FLIT MSL
15 DEC. 62
ASCENSION NO. 200
0835 HRS MST

UPPLR AIR DATA
3490030200
JALLEN
TABLE 23
Cont'd

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FLIT	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES (TN))	SPEED KNOTS	INDEX OF REFRACTION
44000.0	158.9	-60.4		260.2	568.2	291.2	50.1	1.000058
44500.0	155.1	-59.7		255.0	569.2	290.2	48.1	1.000056
45000.0	151.3	-60.2		247.6	568.5	289.1	46.3	1.000055
45500.0	147.7	-60.4		241.8	568.2	288.8	46.3	1.000054
46000.0	144.2	-59.9		235.5	568.9	288.4	46.3	1.000052
46500.0	140.7	-59.5		229.4	569.5	288.1	46.1	1.000051
47000.0	137.3	-59.0		223.4	570.1	287.8	45.9	1.000050
47500.0	134.0	-58.9		218.0	570.2	286.9	44.2	1.000049
48000.0	130.8	-59.1		213.0	569.9	285.8	42.4	1.000047
48500.0	127.7	-59.4		208.1	569.6	284.9	40.8	1.000046
49000.0	124.6	-59.6		203.3	569.3	284.0	39.2	1.000045
49500.0	121.7	-59.8		198.6	569.0	283.4	38.1	1.000044
50000.0	118.7	-60.0		194.1	568.7	283.0	37.2	1.000043
50500.0	115.9	-60.2		189.6	568.6	282.4	36.4	1.000042
51000.0	113.1	-59.9		184.8	568.9	281.6	35.6	1.000041
51500.0	110.6	-59.7		180.2	569.2	281.0	35.2	1.000040
52000.0	107.8	-59.6		175.8	569.4	280.6	35.1	1.000039
52500.0	105.2	-59.4		171.5	569.5	281.4	35.0	1.000038
53000.0	102.7	-59.4		167.3	569.6	283.3	35.0	1.000037
53500.0	100.2	-59.3		163.3	569.7	285.9	34.8	1.000036
54000.0	97.8	-59.5		159.5	569.4	289.5	34.4	1.000036
54500.0	95.5	-59.8		155.8	569.1	292.9	34.0	1.000035
55000.0	93.2	-60.0		152.3	568.7	295.1	33.6	1.000034
55500.0	90.9	-60.3		148.8	568.4	297.2	33.3	1.000033
56000.0	88.7	-60.6		145.4	568.0	297.5	32.8	1.000032
56500.0	86.6	-60.8		142.0	567.7	297.6	32.4	1.000032
57000.0	84.5	-61.1		138.8	567.3	298.0	31.5	1.000031
57500.0	82.5	-61.3		135.6	567.0	298.5	30.5	1.000030
58000.0	80.5	-61.6		132.5	566.7	298.3	28.6	1.000030
58500.0	78.5	-61.8		129.5	566.3	296.9	25.8	1.000029
59000.0	76.6	-62.1		126.5	566.0	294.6	22.7	1.000028
59500.0	74.8	-62.4		123.6	565.6	286.1	18.1	1.000028
60000.0	73.0	-62.6		120.8	565.3	272.2	14.1	1.000027
60500.0	71.2	-61.3		117.1	567.0	251.9	12.1	1.000026
61000.0	69.5	-59.7		113.5	569.2	228.6	12.1	1.000025
61500.0	67.9	-59.4		110.0	569.6	216.2	13.4	1.000025
62000.0	66.2	-59.0		107.8	570.1	214.3	14.6	1.000024
62500.0	64.7	-58.6		105.0	570.6	213.9	15.0	1.000023
63000.0	63.1	-58.3		102.4	571.0	217.3	13.7	1.000023
63500.0	61.6	-56.6		99.2	573.2	221.4	12.4	1.000022

OPTIC COORDINATES
33.10712 LAT 116
106.49511 LONG 116

UPPER AIR DATA
3400000200
JALLET
TABLE 23
Cont'd

STATION ALTITUDE 4000.00 F, 1 MSL
15 DEC 62
ASCENSION 10. 200

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	WIND DATA DIRECTION SPEED KIOTS	INDEX OF REFRACTION
64000.0	60.2	-56.9		90.9	572.9	222.8	1.000022
64500.0	59.7	-57.1		94.7	572.8	225.6	1.000021
65000.0	59.3	-57.4		92.6	572.2	240.6	1.000021
65500.0	59.1	-57.7		90.5	571.9	275.3	1.000020
66000.0	58.7	-57.9		88.5	571.5	314.8	1.000020
66500.0	58.4	-58.2		86.5	571.2	32.9	1.000019
67000.0	58.1	-58.4		84.5	570.8	75.6	1.000019
67500.0	57.9	-58.7		82.6	570.5	85.0	1.000018
68000.0	57.7	-58.7		80.7	570.5	92.5	1.000018
68500.0	57.5	-58.1		78.5	571.3	102.6	1.000017
69000.0	57.3	-57.5		76.5	572.1	226.1	1.000017
69500.0	57.2	-56.9		74.4	572.9	231.3	1.000017
70000.0	57.1	-56.6		72.6	573.3	251.2	1.000016
70500.0	57.0	-56.4		70.6	573.5	251.1	1.000016
71000.0	56.9	-56.3		69.1	573.7	271.3	1.000015
71500.0	56.8	-56.1		67.5	573.9	291.1	1.000015
72000.0	56.7	-56.0		65.8	574.1	314.5	1.000015
72500.0	56.6	-55.8		64.3	574.3	331.0	1.000014
73000.0	56.5	-55.7		62.7	574.5	7.1	1.000014
73500.0	56.4	-55.5		61.2	574.7	20.1	1.000014
74000.0	56.3	-55.4		59.7	574.9	31.4	1.000013
74500.0	56.2	-55.2		58.3	575.1	43.3	1.000013
75000.0	56.1	-55.1		56.9	575.3	62.9	1.000013
75500.0	56.0	-54.9		55.5	575.5	70.6	1.000012
76000.0	55.9	-54.8		54.2	575.7	81.8	1.000012
76500.0	55.8	-54.6		52.9	575.9	85.0	1.000012
77000.0	55.7	-54.5		51.6	576.1	87.3	1.000011
77500.0	55.6	-54.3		50.3	576.3	89.6	1.000011
78000.0	55.5	-54.2		49.1	576.5	91.7	1.000011
78500.0	55.4	-54.0		47.9	576.7	92.3	1.000011
79000.0	55.3	-53.6		46.7	577.2	92.7	1.000010
79500.0	55.2	-53.2		45.6	577.6	94.3	1.000010
80000.0	55.1	-52.7		44.4	578.5	98.3	1.000010
80500.0	55.0	-52.2		43.3	579.1	101.9	1.000010
81000.0	54.9	-51.7		42.2	579.7	103.8	1.000009
81500.0	54.8	-51.2		41.2	580.3	105.6	1.000009
82000.0	54.7	-50.8		40.1	581.0		1.000009
82500.0	54.6	-50.3		39.1	581.6		1.000009
83000.0	54.5	-49.8		38.1	582.2		1.000008
83500.0	54.4	-49.3		37.2	582.8		1.000008

STATION ALTITUDE 405,000 FEET ASL
15 DEC. 62
ASCENSION NO. 206

MANDATORY LEVELS
3470030200
JALLEN
TABLE 24

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA		
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS	GUSTS KNOTS
850.0	5129.	3.1	-11.2	34.	230.0	1.1	
800.0	6733.	1.5	-17.3	25.	263.3	4.9	
750.0	8435.	.4	-20.9	18.	306.9	9.3	
700.0	10245.	-1.2	-21.2	20.	304.0	13.2	
650.0	12174.	-3.7	-23.3	20.	305.1	21.6	
600.0	14238.	-6.5	-20.3	32.	305.7	20.7	
550.0	16409.	-11.2	-25.1	30.	290.7	32.8	
500.0	18826.	-16.3	-30.1	29.	301.4	41.3	
450.0	21407.	-20.5	-38.7	18.	305.7	38.6	
400.0	24224.	-28.2	-43.2	22.	311.4	43.8	
350.0	27313.	-36.7	-49.6	25.	307.6	55.3	
300.0	30749.	-45.7			314.4	62.1	
250.0	34639.	-56.5			314.0	59.8	
200.0	39193.	-65.1			293.4	64.3	
175.0	41910.	-60.0			294.9	58.0	
150.0	45064.	-60.7			287.0	40.3	
125.0	48808.	-59.6			284.2	39.5	
100.0	53385.	-59.3			280.0	34.8	
80.0	57446.	-61.6			290.0	20.0	
70.0	60650.	-59.8			230.4	11.9	
60.0	63437.	-56.9			222.9	9.1	
50.0	67008.	-58.9			90.1	4.2	
40.0	72240.	-55.8			350.8	4.4	
30.0	78230.	-54.0			92.4	10.9	
25.0	82152.	-50.3					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

DAT
FILM
2-8